Manual # 99903621

Model 3203i Parts

Revised 20100816

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Iowa Mold Tooling Co., Inc. is an Oshkosh Corporation company.

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Revisions

DATE	LOCATION	DESCRIPTION
20050526	32000578, 32000659, 32000660	UPDATED 1015E MAST AND BOOM ASSEMBLIES
20050830		MODEL CHANGE TO 3203i
20051220		ADDED HYDRAULIC MAST, BOOMS
20070524		ADDED CRANE WEIGHT TO SPECS.
20070917	32000578, 32000539	ADDED 200 AMP FUSE & FUSE HOLDER.
20080130	BOOM ASM	CHANGED WIRE ROPE SIZE TO 1/4 X 80' (32000608)
	32000882	NEW ANTI-TWO-BLOCK ASM, UPDATED BOOM ASSEMBLY DRAWINGS.
20080304	BOOM ASM	ADDED OLD VERSIONS OF BOOM ASSEMBLY DRAWINGS FOR SERVICE PARTS
20080515	32000902, MAST & BOOM ASSEMBLIES	NEW HYDRAULIC POWER UNIT 32000902, NEW MAST AND BOOM ASSEMBLIES.
20080822	32000539, 32000578	HIGH AMP FUSE INCREASED FROM 200 AMP TO 225 AMP. ALSO ADDED WIRING DIAGRAM.
20090113		ADDED INSTRUCTIONS TO CONVERT ANTI-TWO-BLOCK SYSTEM FROM HANGING WEIGHT TO PLUNGER.
20090403	32000682	ADDITIONAL PARTS NEEDED FOR CIRCUIT BOARD.
20091007	32000515, 32000953	OBSOLETED OLD GEAR PUMP AND POWER UNIT. REPLACED WITH 32000953
20100816	32000039	REPLACED WITH 32000957 SOLENOID KIT.

CHAPTER 1

Introduction

This manual deals with information applicable to your IMT crane model, and is provided to assist you with ordering parts for your IMT crane. It contains additional instructions regarding your installation.

For operating instructions, refer to the IMT Electric-Hydraulic Telescopic Crane Operation & Safety Manual (IMT part number 99903618), and for maintenance and repair instructions, refer to the IMT Electric-Hydraulic Telescopic Crane Maintenance & Repair Manual (IMT part number 99903619).

It is the user's responsibility to maintain and operate this unit in a manner that will result in the safest working conditions possible.

Warranty of this crane will be void on any part of the crane subjected to misuse due to overloading, abuse, lack of maintenance and unauthorized modifications. No warranty - verbal, written or implied - other than the official, published IMT new machinery and equipment warranty will be valid with this crane. In addition, it is also the user's responsibility to be aware of existing Federal, State and Local codes and regulations governing the safe use and maintenance of this crane. This crane was designed and built to meet the standards of ANSI/ASME B30.5, Mobile & Locomotive Cranes. Contact the American Society of Mechanical Engineers (www.asme.org) for more information on ANSI/ASME B30.5.

Throughout this manual, three means are used to draw the attention of personnel. They are NOTEs, CAUTIONs and WARNINGs and are defined as follows:

NOTE

A NOTE is used to either convey additional information or to provide further emphasis for a previous point.

CAUTION

A CAUTION is used when there is the very strong possibility of damage to the equipment or premature equipment failure.

WARNING

A WARNING is used when there is the potential for personal injury or death.

For a safe work environment, treat this equipment with respect and service it regularly.

CHAPTER 2

Specifications

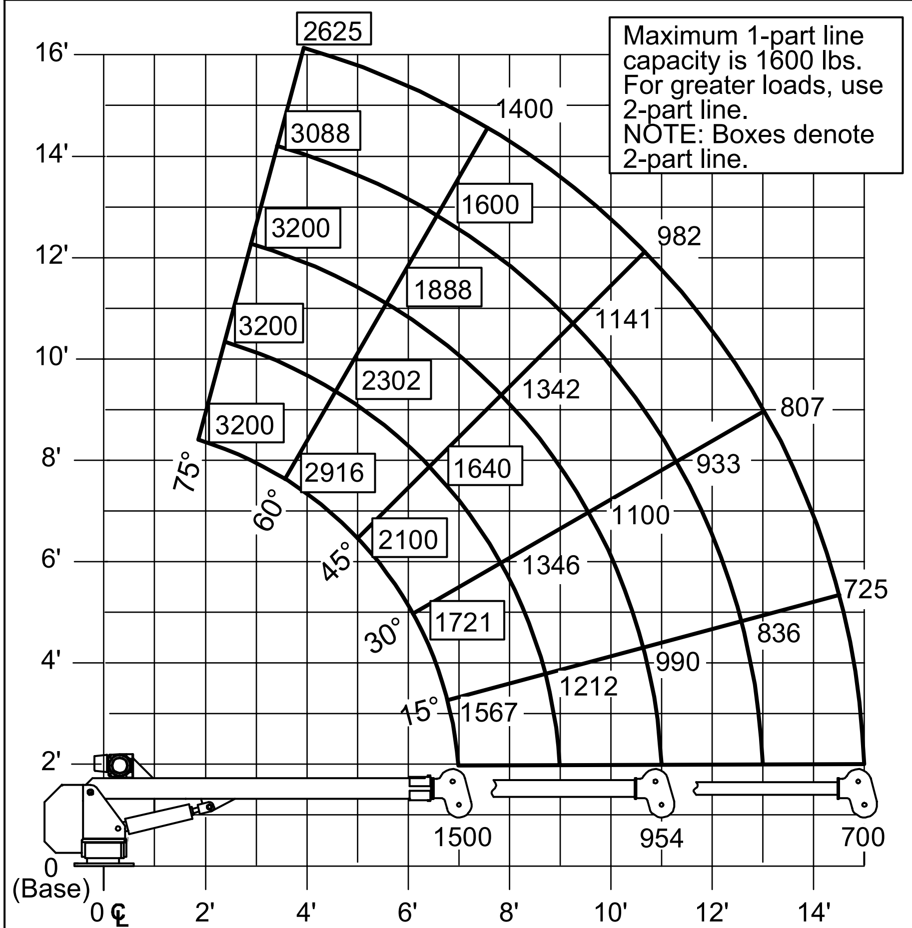
In This Chapter

Model 3203i Specifications

Crane Rating	10,000 ft-lb
Maximum Horizontal Reach (from centerline of rotation)	11' (3.35 m)
Maximum Vertical Reach	12'-1" (3.68 m) (1M and 1H) 16'-1" (4.90 m) (2M and 1H1M)
Maximum Capacity	3,200 lb (1451 kg)
Maximum Capacity at Maximum Reach	954 lb (432 kg) (1M and 1H) 700 lb (318 kg) (2M and 1H1M)
Crane Weight	525 lb (238 kg) (1M) 600 lb (272 kg) (2M) 560 lb (254 kg) (1H) 650 lb (295 kg) (1H1M)
Mounting Space Required	14" x 18" (35.5 cm x 45.7 cm)
Tie-down Bolt Pattern	12" x 12" (30.5 cm x 30.5 cm) and 11.5" x 14.75" (29.2 cm x 37.5 cm)
Wire Rope	86' (26 m) of 7/32" (0.56 cm) (7x19 Galv.)
Remote Control Cord Length	25' (7.6 m)
Electrical System	
Motor Voltage	12 VDC
Control Voltage	12 VDC
Battery Type	Maintenance type 1000 CCA, Deep Cycle type (minimum)
Alternator Requirement	100 amp minimum
Hydraulic System	
System Pressure	2,200 psi (152 bar)
Maximum Flow	2.2 gpm (8.3 lpm)
Oil Type	Dexron II, III or Mercon ATF
Minimum Chassis Requirement	10,500 lb (4763 kg) GVWR

Model 3203i Capacity Chart

3203i CAPACITY CHART

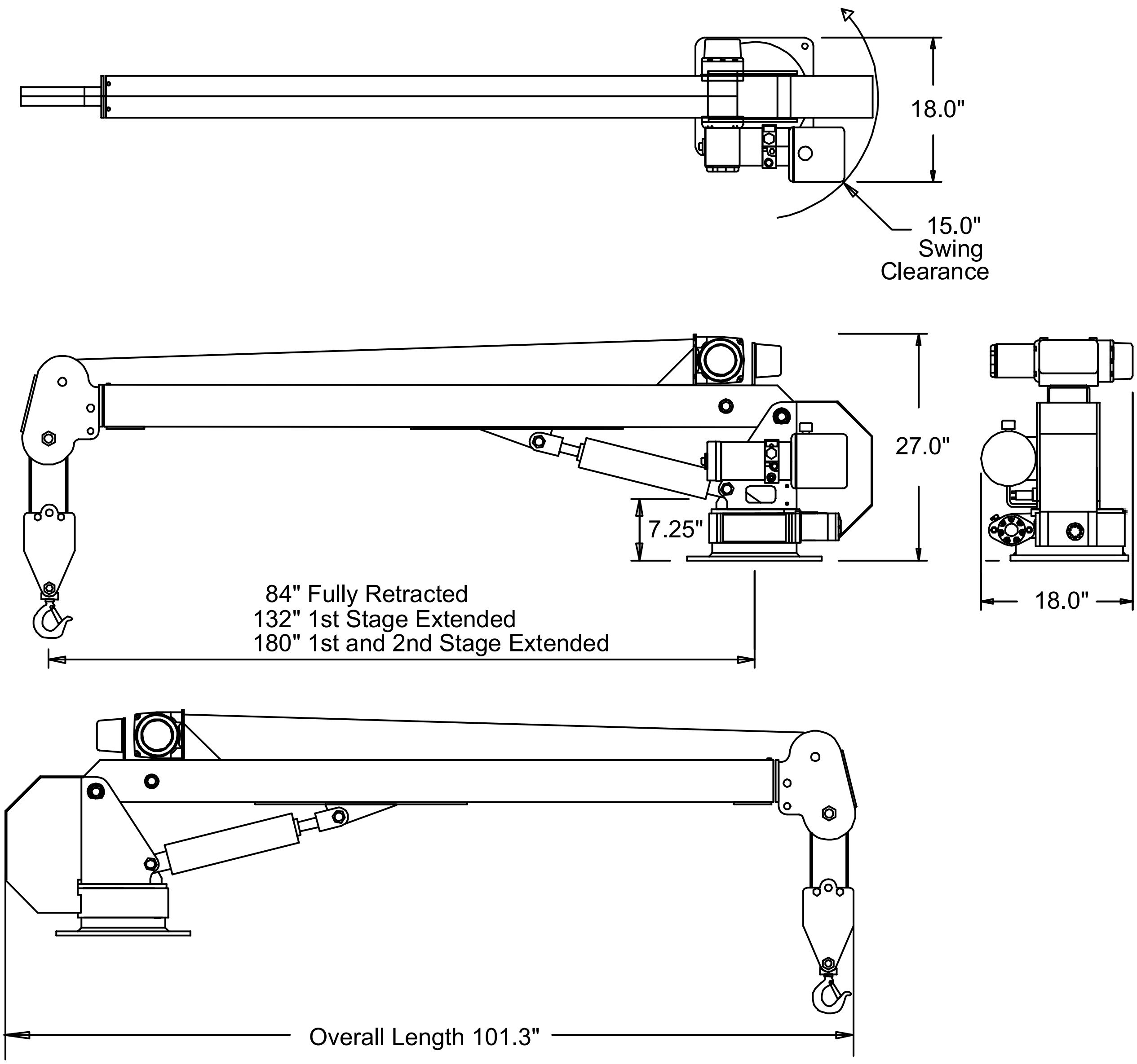


DISTANCE IN FEET / LOAD IN POUNDS.
Weight of load handling devices are part of the load lifted and must be deducted from the capacity.

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Model 3203i Geometric Configuration

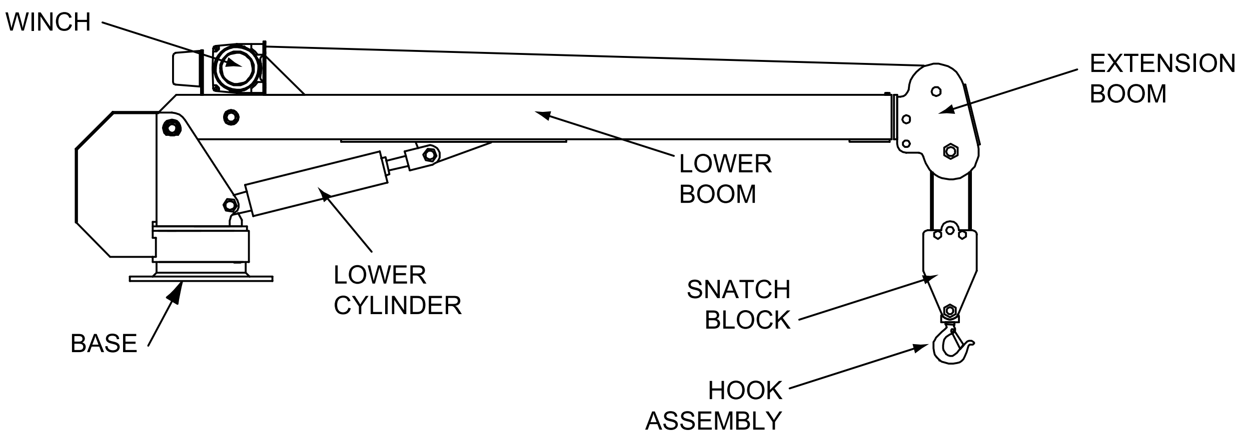


CHAPTER 3

Crane Reference

In This Chapter

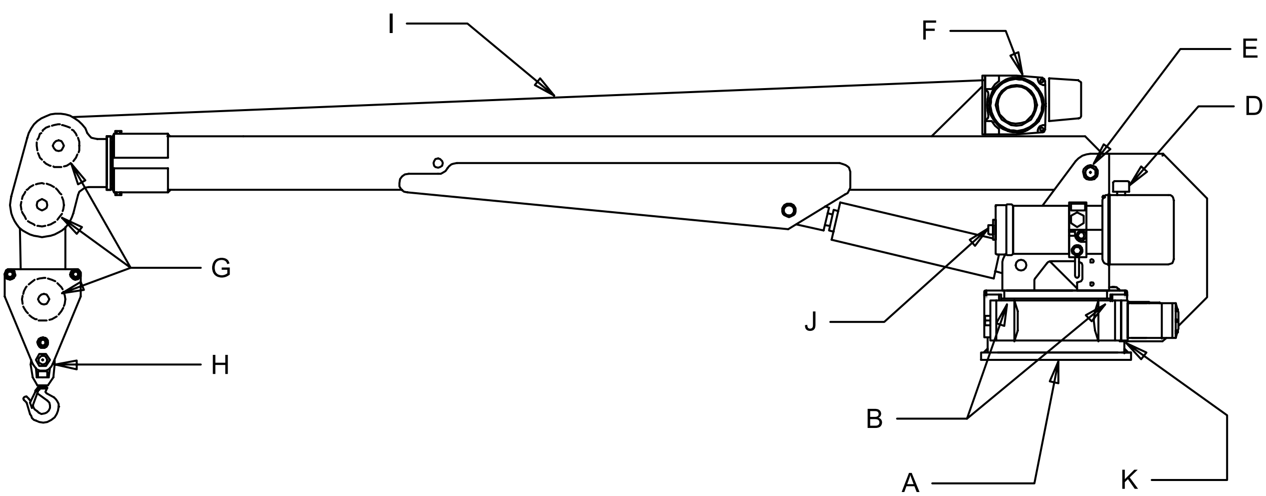
3203i Major Assemblies



Lubrication Schedule

Refer to the Lubrication Diagram for the locations of the lubrication points referred to in the following schedule.

DAILY	Check and fill hydraulic reservoir (D) to 1" of top using Dexron ATF. Make sure all cylinders are retracted before checking level.
WEEKLY	Apply high quality bearing grease to worm gear bearing via zerk fittings (B).
	Check rotation gear (K) for coverage and contaminants. Clean and reapply grease as necessary. Use only Moly 29 grease.
MONTHLY	Lubricate rotation bearing via zerk (A).
	Lubricate boom pivot pin via zerks (E).
	Apply small amount of machine oil to hook swivel mechanism (H).
	Apply small amount of grease between polymer rope pulleys (G) and axles.
	Apply rope oil with rag or spray to wire rope (I). Wipe off excess.
YEARLY	Remove load brake from winch (F) and clean and apply a light coat of Lithium base grease to brake. Wipe interior bore of rope drum clean and inspect for damage. If no damage, apply light coat of Lithium grease and reassemble winch.
	Remove end cap from DC motor. Blow out debris and dust. Apply small amount of grease to armature bearing (J) and reassemble.



Recommended Spare Parts

Recommended spare parts for one-year for the 3203i Crane:

NOTE: This spare parts list does not necessarily indicate that the items can be expected to fail in the course of a year. It is intended to provide the user with a stock of parts sufficient to keep the unit operating with the minimal down-time waiting for parts. There may be parts failures not covered by this list. Parts not listed are considered as not being Critical or Normal Wear items during the first year of operations and you need to contact the distributor or manufacturer for availability.

ITEM #	DESCRIPTION	QTY
32000022	Hydraulic Hose, Boom Down	1
32000023	Hydraulic Hose, Up	1
32000882	Anti-Two-Block Assembly	1
32000025	Anti-Two-Block Reel	1
32000026	Hydraulic Reservoir	1
32000027	O-Ring, Hydraulic Reservoir	1
32000028	Breather Cap	1
32000029	Hydraulic Pump Motor, 12 VDC	1
32000030	Directional Valve Cartridge	1
32000031	Overload Pressure Switch	1
32000682	Control Module	1
32000033	Crane Wiring Harness	1
32000034	Remote Pendant	2
32000608	Wire Rope, 1/4" x 80'	1
32000037	Wire Rope Pulley, 5"	2
32000038	Dust Cap, Quik Turn	1
32000957	Solenoid Assembly (Replaced 32000039)	1
32000040	Circuit Breaker, 200 amp (Through S/N 4223)	1
32000826	Fuse, 225-amp (200-amp from S/N 4223 to 4338)	1

Crane Control

IMT's electric-hydraulic telescopic cranes are controlled by pendant remote controls. The remote plugs into an outlet-style attachment at the back of the crane. After using the crane, stow the remote pendant in an interior location. Refer to the IMT Electric-Hydraulic Telescopic Crane Manual for additional crane operation information.

Crane Installation

Structural Preparation

Your new crane has been designed to lift the rated loads with sufficient safety factor included. However, the structure to which you bolt the crane must be strong enough to support the crane loads and to prevent failure under maximum loading conditions. If you are mounting to a truck body which has been factory reinforced for a crane, be sure that it has been designed and manufactured for the appropriate torque according to the following chart.

Crane Model	Truck Body Design Torque
Model 3203I	10,000 ft-lb
Model 4004i	16,000 ft-lb
Model 5005i	25,000 ft-lb
Model 6006i	36,000 ft-lb

If you are mounting to a truck body or platform body which has not been manufactured for crane installation, make sure you design and build a sufficient structure to support the crane. IMT recommends that you seek assistance from a professional engineer for the structural design of your installation.

It is critical that you follow the material and bolt recommendations per your crane model. Refer to the following chart for material and bolt grades.

Crane Model	Material	Bolt Size	Preferred Mounting Pattern
Model 3203i	A-36 steel plate, minimum 1/2" thick	1/2" grade 8 or equivalent	12" x 12"
Model 4004i	A-36 steel plate, minimum 1/2" thick	3/4" grade 8 or equivalent	12" x 12"
Model 5005i	A-36 steel plate, minimum 3/4" thick	7/8" grade 8 or equivalent	14-3/4" x 14-3/4"
Model 6006i	A-36 steel plate, minimum 1" thick	1" grade 8 or equivalent	14-3/4" x 14-3/4"

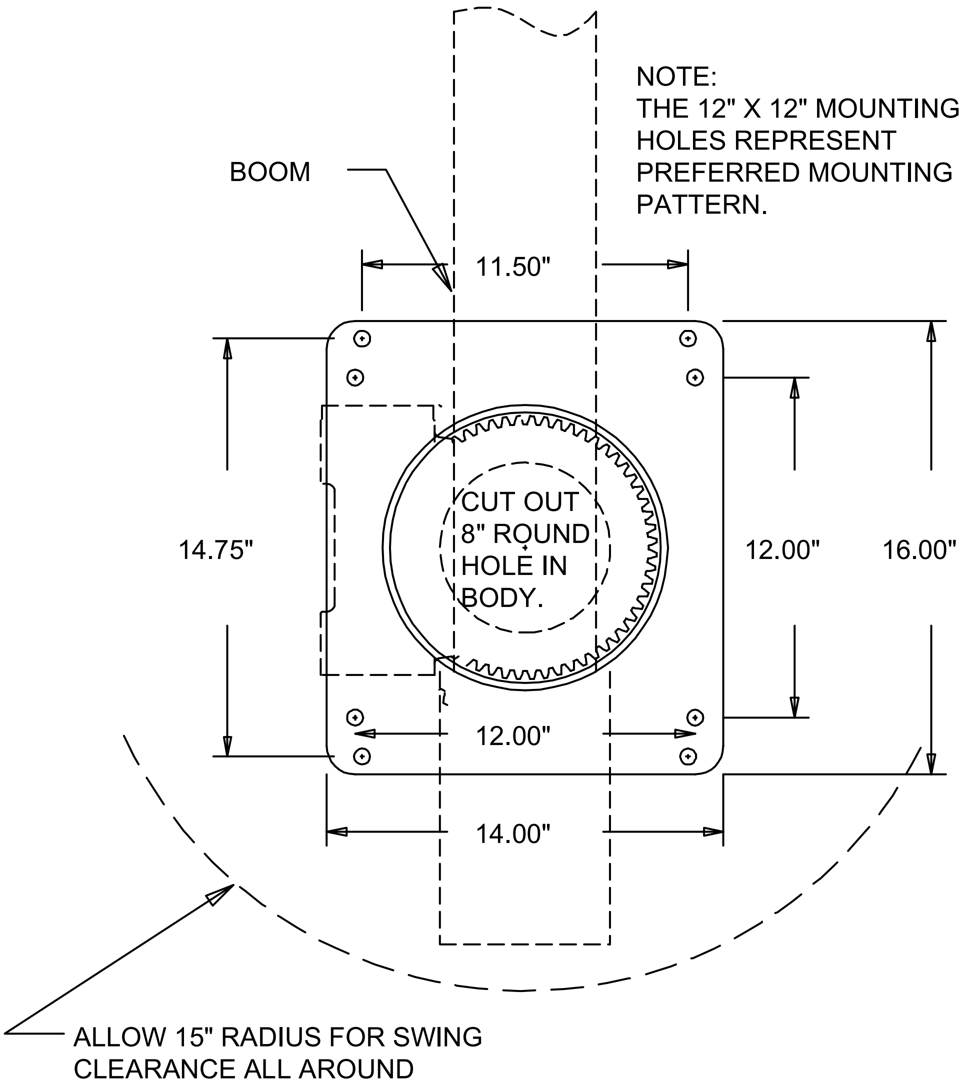
The mounting structure of the body should effectively transfer the crane loads to the ground via structural connection to the outrigger or similar structure.

CAUTION

Lifting loads without supporting the crane and truck body with outriggers can damage truck frame, body and rotation gear.

The addition of the weight of the crane to the vehicle weight can alter the driving and riding characteristics of the vehicle. It is recommended that additional overload springs be installed on the crane side of the truck to level it and compensate for the additional weight. Remember to subtract the installed weight of the crane and accessories from the payload capacity of the truck. Be careful not to overload the truck.

3203i Mounting Diagram

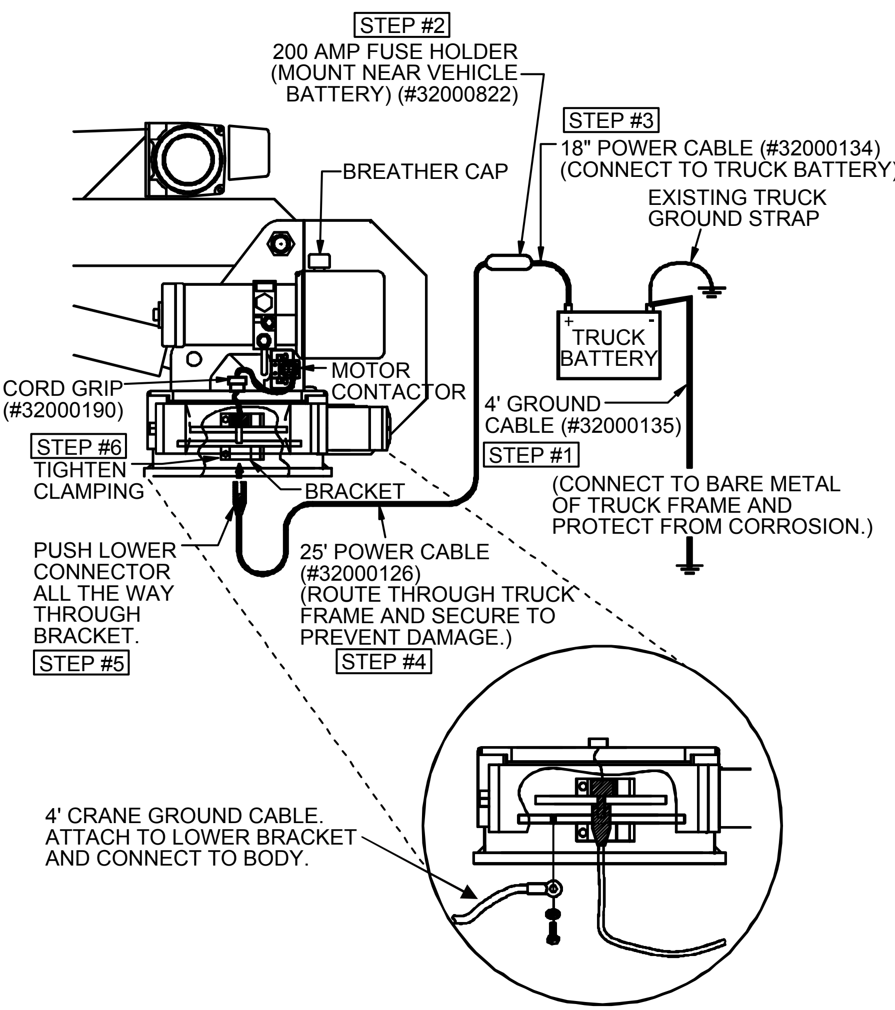


Electrical Installation

Once mounted, connect your crane to the vehicle's 12VDC electrical system via the 25-foot power cable.

NOTE

Replace the vehicle's original equipment battery with one or two (depending on crane model) maintenance type, deep cycle batteries in order to handle the extra power requirements of the crane. Under normal usage (up to 3 to 4 short operations per day), one or two 1000 CCA Deep Cycle Truck batteries should provide sufficient power for the crane as long as the vehicle is running at a fast idle while the crane is in use. An alternator of at least 100 amp rating is required, and 150 amps are recommended for higher duty cycle applications. If longer duty cycles are anticipated, a second battery (located as close to the crane as possible) may be needed. In this case, BE SURE to provide circuit protection from shorting of the power cable either with a circuit breaker or an inline fuse. Coat all battery and power cable connections with a corrosion protective coating.

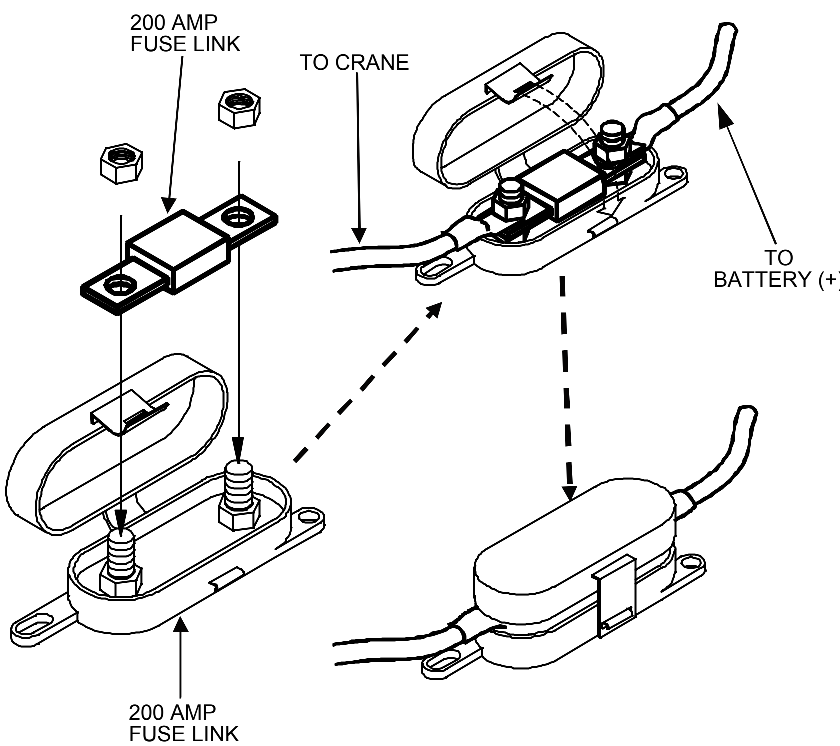


1 Install the 4-foot crane ground cable (#32000135) (shown in detail in figure) to the lower rotation bracket. Attach the cable to bare metal on the truck body which is grounded to the battery system.

IMPORTANT! Install the 4 foot Frame Ground Cable (supplied) from the negative terminal of the battery to the vehicle frame making sure that good metal to metal contact is made. The crane electric system's ground completes the electrical circuit through the structure of the crane to the vehicle frame. The factory ground provided in the vehicle is NOT sufficient to carry the current required by the crane. Without the addition of this extra ground cable your crane will not operate to its' rated capacity and damage to the crane's electric motors, contactors or the vehicle electrical system may occur.

2 Mount the 200 amp fuse holder (#32000822) as close as possible to the battery.

3 Connect it to the positive (+) post of the battery with the 18" power jumper cable (#32000134). The fuse holder should be easily accessible in case of fuse replacement.

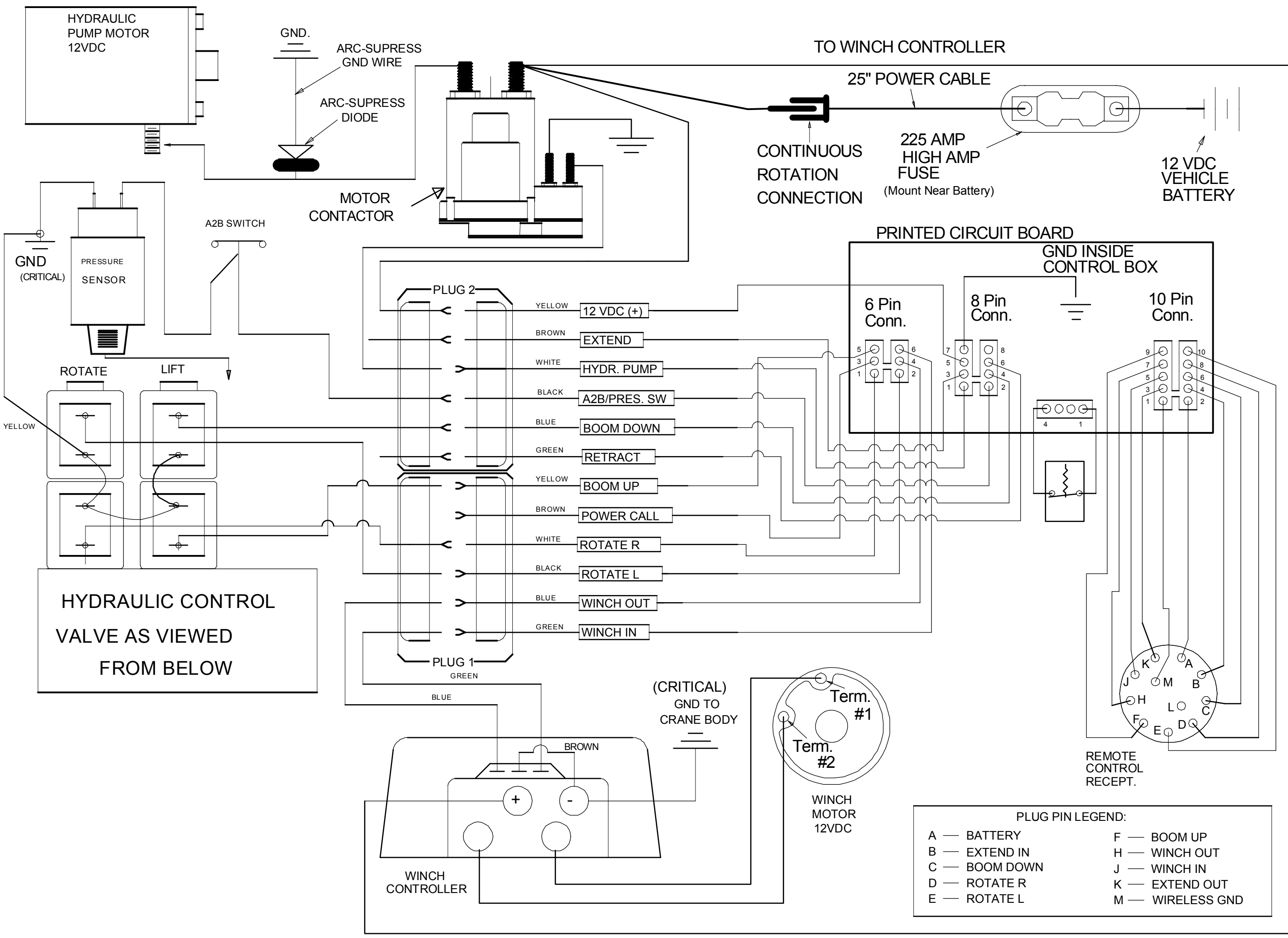


4 Run the 25-foot power cable (#32000126) through the truck frame and up into the engine compartment.

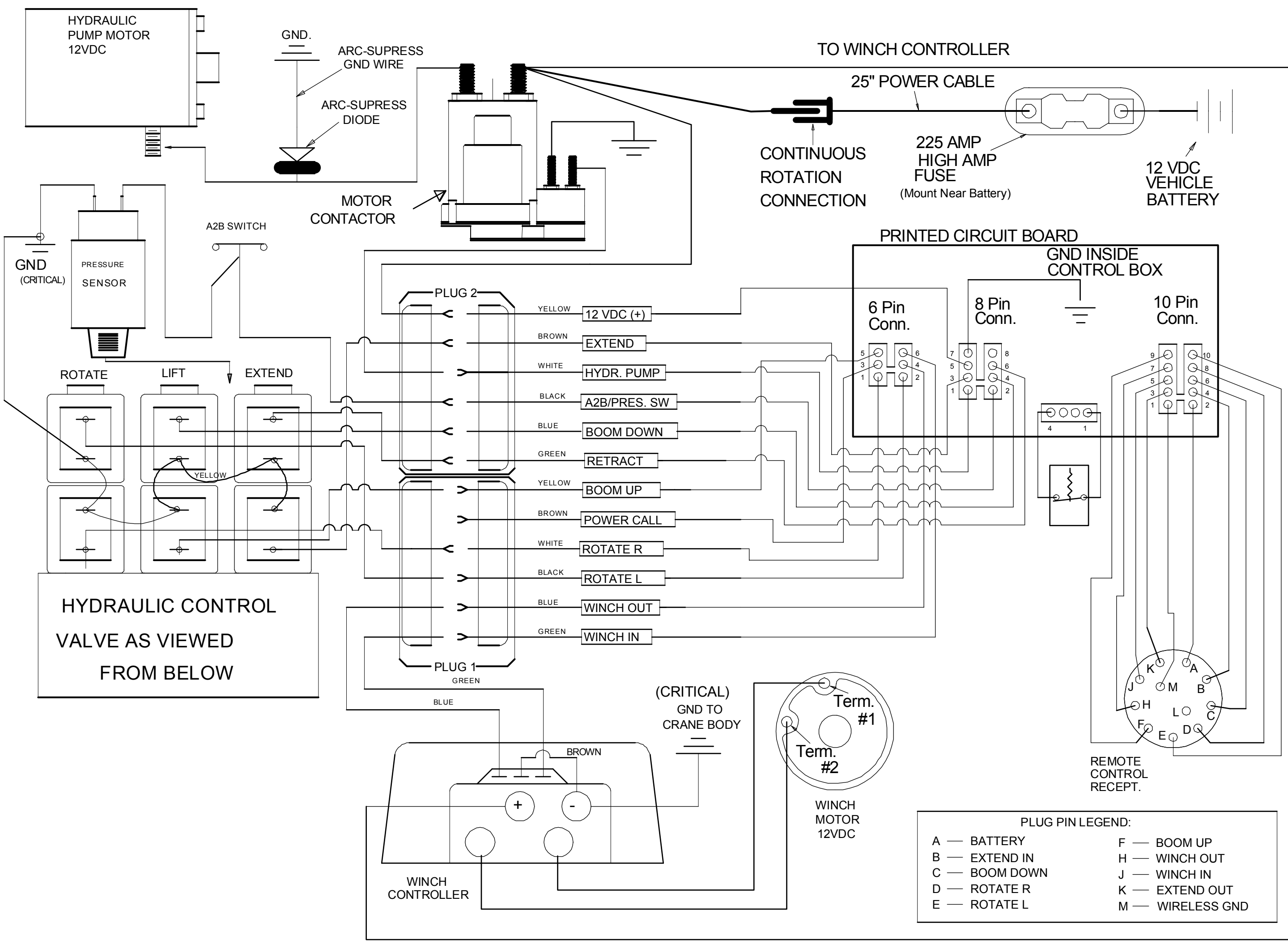
5 Push the power cable connector up through the bracket clamp all the way until the upper and lower rubber insulators touch.

6 Tighten the clamp all the way. Protect the power cable from abrasion, flying gravel, hot exhaust pipes etc. by fastening it inside the frame channel and using protective covering (loom, conduit etc.). Be sure to use rubber grommets or other protection when running power cable through steel bulkheads, etc.

Wiring Diagram, 3203i & 4004i Manual Extension



Wiring diagram, 3203i & 4004i Power Extension



Recommended Installation Locations

The location of the crane on the truck body affects the usability and stability of the truck during lifting. Carefully plan the location of your crane on the truck body to account for safety, stability and functionality.

The following are suggested locations for your crane:

1 Passenger rear corner of the truck body. This is the most common location because it allows the operator to be on the "curb side" of the truck when working with the crane. This installation requires rear mounted outriggers.

2 In the center, at the rear – This allows the use of drop legs at each corner of the truck bed instead of outriggers. The disadvantage of this location is that for lifting at the side of the truck, the crane has to reach over half the width of the bed for the closest lifting point, which effectively lowers the maximum capacity of the crane at the side of the truck. An advantage of this location is that it provides the maximum stability for lifting the heaviest loads at the rear of the truck.

3 Other locations such as behind the cab, in the center of the bed, and as a trailer mount, have been successfully used to meet special needs. If you have special installation needs, contact the factory or your dealer for assistance in planning and executing your installation.

If you will not be lifting tall objects (24” or higher) or if you are mounting on top of the tool box on a crane reinforced utility body, you can bolt the crane directly to the body. If you will be mounting on a platform body and you will be handling loads which are taller than 24”, such as LP gas tanks, cemetery monuments, etc., use the mounting pedestal which raises the overall height of the mounted crane by 20”. This allows for more booming stroke with the taller loads.

The crane should be supported when the vehicle is traveling (see the OPERATION section of this manual). Failure to provide or use a boom rest can result in damage to the crane. The boom rest should be installed to be as rigid as possible.

CHAPTER 4

Parts

In This Chapter

Parts Information

GENERAL

This section contains the exploded parts drawings and accompanying parts lists for the assemblies used on this crane. These drawings are intended to be used in conjunction with the instructions found in the maintenance and repair manuals for this crane family. For optional equipment such as winches and remote controls, refer to the appropriate service manual.

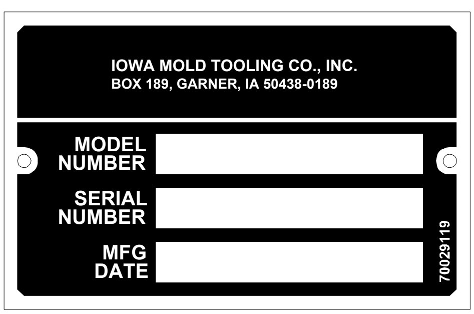
WARNING

DO NOT ATTEMPT TO REPAIR ANY COMPONENT WITHOUT READING THE INFORMATION CONTAINED IN THE REPAIR SECTION. PAY PARTICULAR ATTENTION TO STATEMENTS MARKED WARNING, CAUTION, OR NOTE IN THAT SECTION. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN DAMAGE TO THE EQUIPMENT, PERSONAL INJURY, OR DEATH.

CRANE IDENTIFICATION

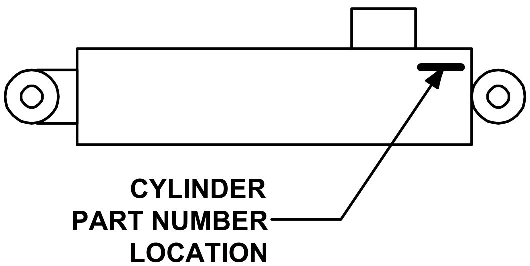
Every IMT crane has an identification placard (see figure). This placard is attached to the inner boom, mast, or crane base. When ordering parts, communicating warranty information, or referring to the unit in correspondence, always include the serial number and model numbers. Address all inquiries to your authorized IMT distributor or to:

Iowa Mold Tooling Co., Inc.
Box 189, Garner, IA 50438-0189
Telephone: 641-923-3711
Technical Support Fax: 641-923-2424



CYLINDER IDENTIFICATION

To insure proper replacement parts are received, it is necessary to specify the complete number/letter sequence for any part requested. Part numbers may be cross checked by comparing the stamped identification on the cylinder case (See figure below) against the information contained in the service manual. You must include the part number stamped on the cylinder case when ordering parts.



WELDMENT IDENTIFICATION

Each of the major weldments - base, mast, inner boom, outer boom, extension boom and outrigger weldments bear a stamped part number. Any time a major weldment is replaced, you must specify the complete part number as stamped on the weldment. The locations of the part numbers are shown in the Crane Reference Section.

ORDERING REPAIR PARTS

When ordering replacement parts:

1 Give the model number of the unit.

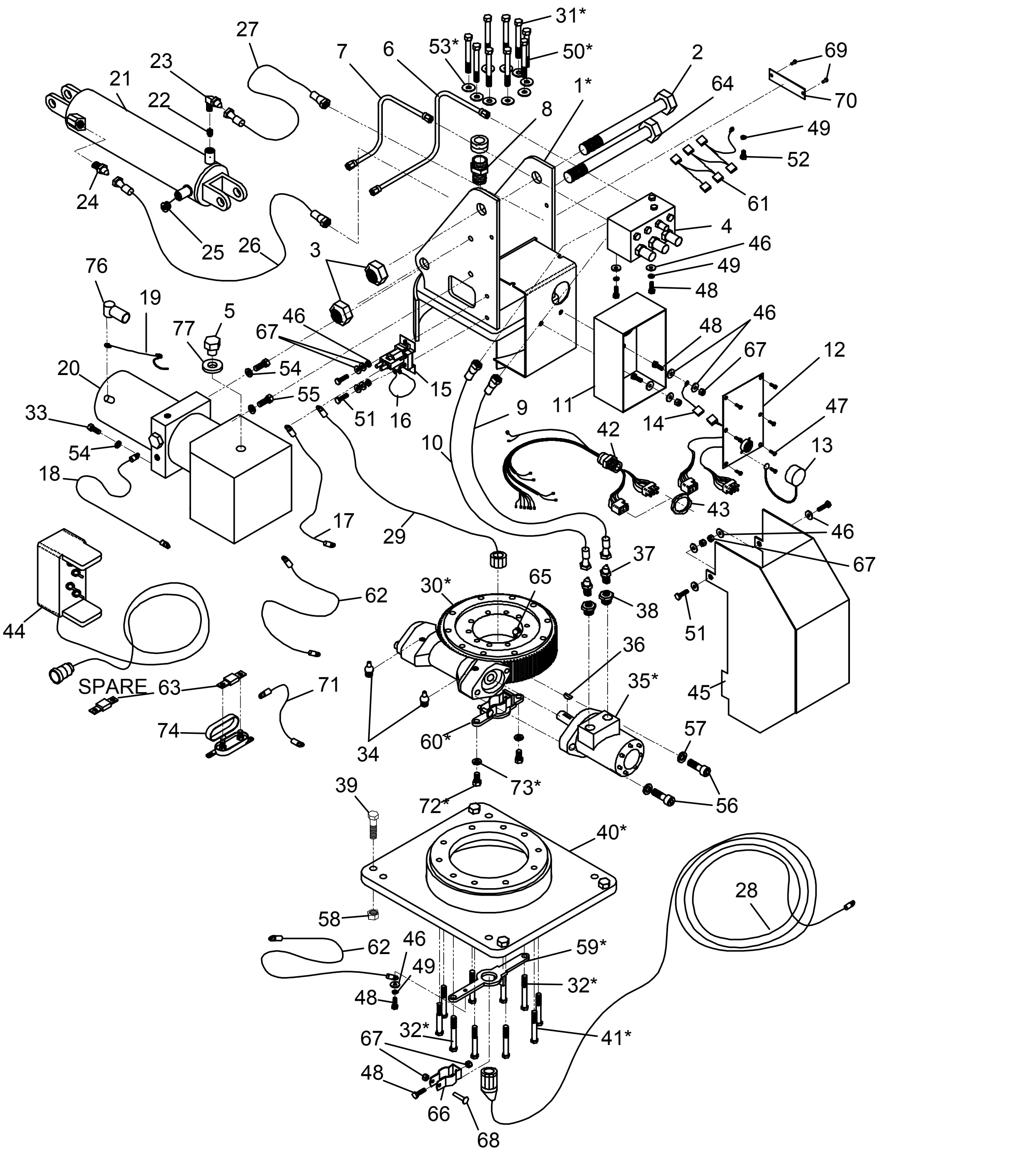
2 Give the serial number of the unit.

3 Specify the complete part number. When ordering cylinder parts, or one of the main weldments, always give the stamped part number.

4 Give a complete description of the part.

5 Specify the quantity required.

Mast Assembly, Manual (32000578)

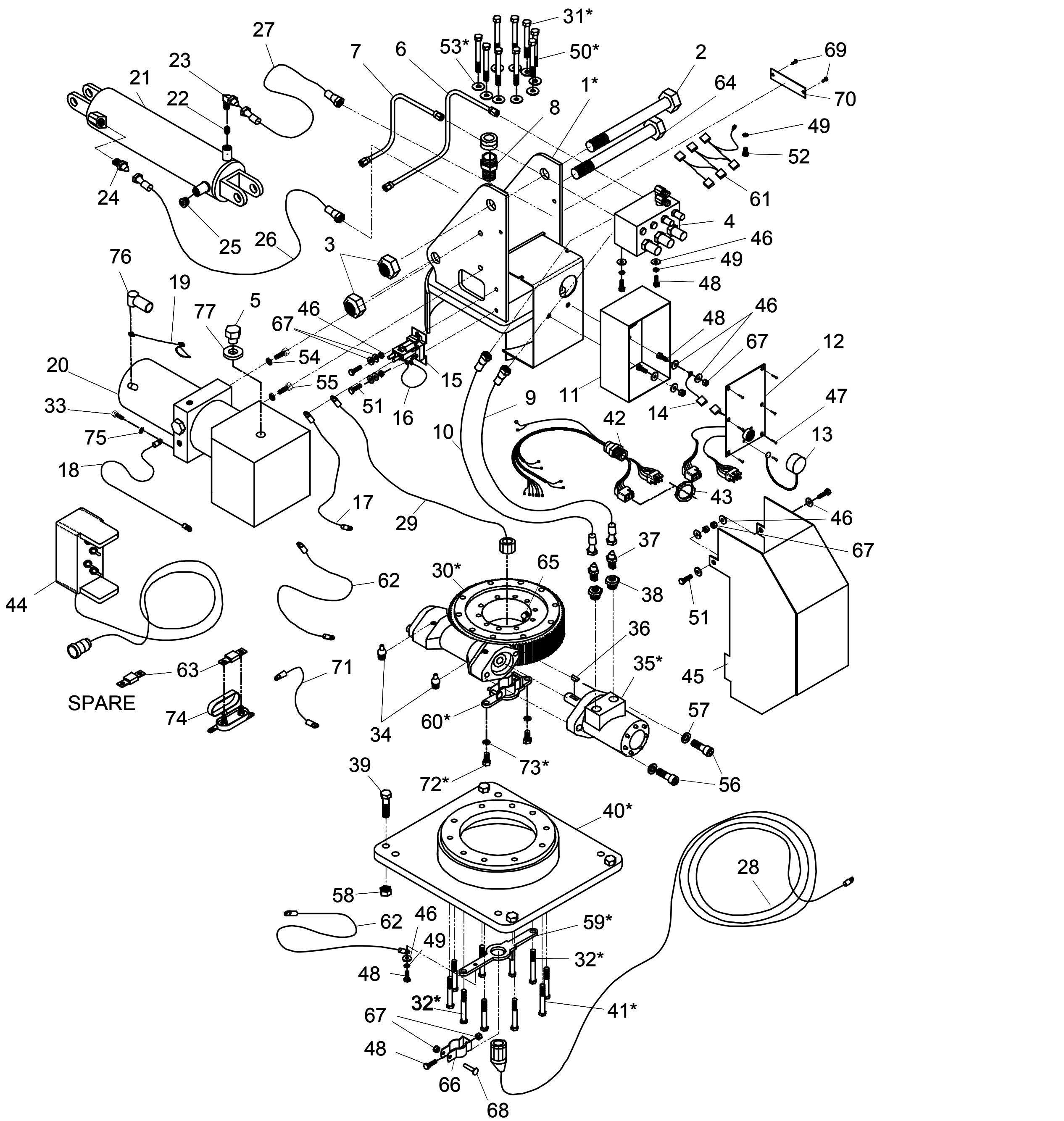


NOTE: CHECK CRANE SERIAL NUMBER AND PARTS LIST FOR P-SERIES OR G-SERIES PARTS, AS NOTED ON ITEMS MARKED WITH *.

32000578 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	32000548	YOKE ASSEMBLY *P SERIES*	1
	32000896	YOKE ASSEMBLY *G SERIES*	1
2.	32000546	BOLT, YOKE PIN	1
3.	32000289	NYLON LOCK NUT, 1-8 PLATED	2
4.	32000579	HYDRAULIC MANIFOLD ASSY XTW	1
5.	32000893	BREATHER CAP	1
	32000894	INLET FILTER	1
6.	32000454	RETURN TUBE	1
7.	32000452	PUMP TUBE	1
8.	32000190	CORD GRIP, 3/4"	1
9.	32000542	4-90FJICx4FJICx16.5	1
10.	32000543	4-90FJICx4FJICx18"	1
11.	32000647	CONTROL MODULE BOX	1
12.	32000682	CONTROL MODULE, w/CIRCUIT BREAKER	1
13.	32000038	QUICK TURN DUST CAP	1
14.	32000184	CONTROL MODULE, GROUND JUMPER	1
15.	32000957	SOLENOID ASSEMBLY (WAS 32000039)	1
16.	32000262	E/H MOTOR CONTACTOR GND JUMPER	1
17.	32000157	WINCH POWER CABLE	1
18.	32000901	MOTOR GROUND CABLE, 30"	1
19.	32000775	E'H MOTOR ARC-SUPRESSION CABLE	1
20.	32000902	HYDRAULIC POWER UNIT ASSY, -L4	1
21.	32000541	3.5" HYDRAULIC CYLINDER	1
22.	32000248	HOSE BREAKE VALVE	1
23.	32000217	1/4 MJIC x 3/8 M O-RING 90°	1
24.	32000428	1/4 MJIC x 3/8 M ORING	1
25.	32000331	PLUG, 6SAE, ALLEN HEAD	1
26.	32000022	HYDRAULIC HOSE, 29" LG.	1
27.	32000023	HYDRAULIC HOSE, 17.25" LG.	1
28.	32000126	POWER CABLE ASSY, 25'	1
29.	32000510	YOKE POWER CABLE	1
30.	32000545	WORM GEAR DRIVE ROTATOR, 7" PLS *P SERIES*	1
	32000895	WORM GEAR DRIVE ROTATOR, GPL *G SERIES*	1
31.	32000856	HEX BOLT, 3/8-16 x 3.50, GRD 8, PL *P SERIES*	8
	32000906	HEX BOLT, 1/2-13 x 3.50, GRD 8, PL *G SERIES*	11
32.	32000558	HEX BOLT, 3/8-16 x 3.00, GRD 8, PL *P SERIES*	2
	32000905	HEX BOLT, 7/16-14 x 3.00, GRD 8 PL *G SERIES*	2
33.	32000907	HEX BOLT, 5/16-18 x .75 GRD 5	1
34.	32000617	GREASE ZERK, 1/8-27 STRAIGHT	2
35.	32000540	HYDRAULIC MOTOR, H SERIES *P SERIES*	1
	32000895	HYDRAULIC MOTOR, *G SERIES*	1
36.	32000265	1/4" WOODRUFF SHAFT KEY	1
37.	32000544	ORING - 4MSAE 4MJIC	2
38.	32000340	REDUCER, INT SAE/EXT SAE, 10-4	2
39.	32000557	HEX BOLT, 1/2-13 x 2, GRD 8, PL	4
40.	32000547	MOUNT ASSY. *P SERIES*	1
	32000898	MOUNT ASSY. *G SERIES*	1
41.	32000556	HEX BOLT, 3/8-16 x 2.75, GRD 8, PL *P SERIES*	8
	32000905	HEX BOLT, 7/16-14 x 3.00, GRD 8 PL *G SERIES*	8
42.	32000033	WIRING HARNESS, UNIVERSAL	1
43.	32000295	CONDUIT NUT, 1"	1
44.	32000034	PENDANT 25' W/BAYONET CONNECTOR	1

32000578 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
45.	32000549	VALVE COVER	1
46.	32000471	FLAT WASHER 1/4	11
47.	32000382	PHILLIPS HD SCREW, 6-32 x .50	6
48.	32000066	HEX BOLT, 1/4-20 x .75	7
49.	32000469	LOCK WASHER, 1/4"	4
50.	32000558	HEX BOLT, 3/8-16 x 3 GRD 8 *P SERIES*	1
51.	32000067	HEX BOLT, 1/4-20 x 1	4
52.	32000070	HEX BOLT, 1/4-20 x .50	1
53.	32000654	WASHER, FLAT 3/8 SAE *P SERIES*	9
	32000907	WASHER, FLAT 7/16 SAE *G SERIES*	11
54.	32000476	LOCK WASHER, 3/8"	2
55.	32000078	HEX BOLT, 3/8-16 x 1"	2
56.	32000062	SOCKET BOLT, 1/2-13 x 1.50	2
57.	32000473	LOCK WASHER, 1/2	2
58.	32000553	HEX NUT, 1/2-13, GRD 8	4
59.	32000551	LOWER CONT. ROT. BRKT *P SERIES*	1
	32000900	LOWER CONT. ROT. BRKT *G SERIES*	1
60.	32000550	UPPER CONT. ROT. BRKT. * P SERIES*	1
	32000899	UPPER CONT. ROT. BRKT. *G SERIES*	1
61.	32000243	VAVLE GROUND HARNESS	1
62.	32000135	48" GROUND CABLE	2
63.	32000826	HIGH AMP FUSE 225 AMP (WAS 200 AMP)	2
64.	32000072	HEX BOLT, 1-8 x 8", GRD 8 PL	1
65.	32000561	GREASE ZERK, 1/8-27, 90°	1
66.	32000562	CONDUIT CLAMP	2
67.	32000286	NUT, NYLON 1/4-20	10
68.	32000655	BOLT, CARRIAGE 1/4-20 x .75	2
69.	32000658	SCREW, DRIVE, #8x 3/8	2
70.	32000644	SERIAL NUMBER PLATE	1
71.	32000134	CABLE, 18" BREAKER TO TRUCK BATT	1
72.	32000077	HEX BOLT, 3/8-16 x .50 GRD 5 *P SERIES*	2
	32000716	HEX BOLT, 1/2-13 x .75 GRD 5 *G SERIES*	2
73.	32000476	LOCK WASHER, 3/8" *P SERIES*	2
	32000473	LOCK WASHER, 1/2" *P SERIES*	2
74.	32000822	HIGH AMP FUSE HOLDER	1
75.	32000904	5/16 LOCK WASHER	1
76.	32000890	WINCH CORD BOOT	1
77.	32000892	GROMMET, RUBBER	1
-	32000552	DECAL SET	1
-	32000563	OPEN GEAR COMPOUND	1
REV 20100816 SN 4338			

Mast Assembly, Hydraulic (32000539)

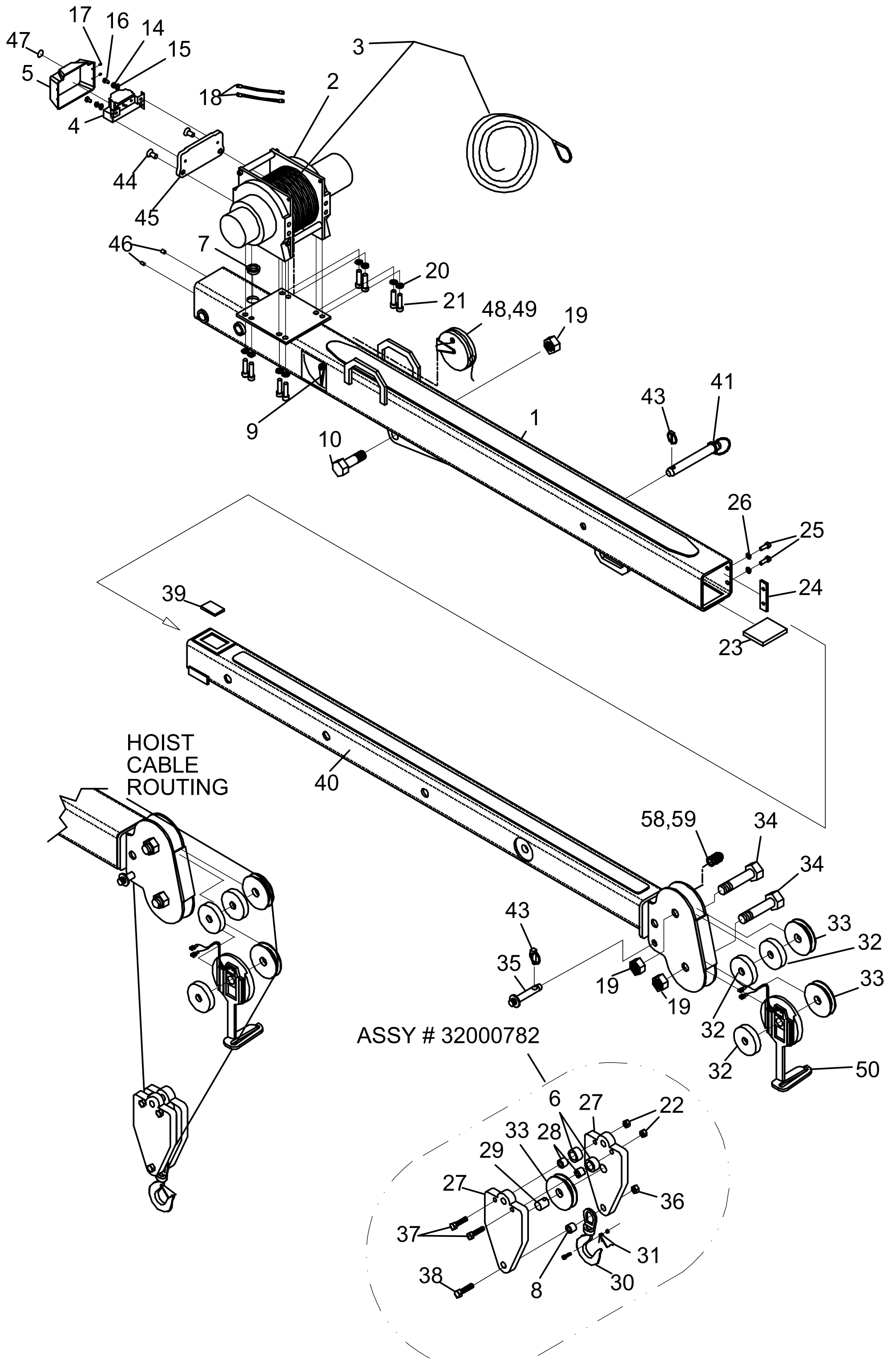


NOTE: CHECK CRANE SERIAL NUMBER AND PARTS LIST FOR P-SERIES OR G-SERIES PARTS, AS NOTED ON ITEMS MARKED WITH *.

32000539 PARTS LIST			
ITEM	IMT PART #	DESCRIPTION	QUANTITY
1.	32000548	YOKE ASSEMBLY *P SERIES*	1
	32000897	YOKE ASSEMBLY *G SERIES*	1
2.	32000546	BOLT, YOKE PIN	1
3.	32000289	NYLON LOCK NUT, 1-8 PLATED	2
4.	32000516	HYDRAULIC MANIFOLD ASSY PXTW	1
5.	32000893	BREATHER CAP	1
	32000894	INLET FILTER	1
6.	32000454	RETURN TUBE	1
7.	32000452	PUMP TUBE	1
8.	32000190	CORD GRIP, 3/4"	1
9.	32000542	4-90FJICx4FJICx16.5	1
10.	32000543	4-90FJICx4FJICx18"	1
11.	32000647	CONTROL MODULE BOX	1
12.	32000682	CONTROL MODULE, w/CIRCUIT BREAKER	1
13.	32000038	QUICK TURN DUST CAP	1
14.	32000184	CONTROL MODULE, GROUND JUMPER	1
15.	32000957	SOLENOID ASSEMBLY (WAS 32000039)	1
16.	32000262	E/H MOTOR CONTACTOR GND JUMPER	1
17.	32000157	WINCH POWER CABLE	1
18.	32000900	MOTOR GROUND CABLE, 30"	1
19.	32000775	E'H MOTOR ARC-SUPRESSION CABLE	1
20.	32000901	HYDRAULIC POWER UNIT ASSY, L32-L4	1
21.	32000541	3.5" HYDRAULIC CYLINDER	1
22.	32000248	HOSE BREAKE VALVE	1
23.	32000217	1/4 MJIC x 3/8 M O-RING 90°	1
24.	32000428	1/4 MJIC x 3/8 M ORING	1
25.	32000331	PLUG, 6SAE, ALLEN HEAD	1
26.	32000022	HYDRAULIC HOSE, 29" LG.	1
27.	32000023	HYDRAULIC HOSE, 17.25" LG.	1
28.	32000126	POWER CABLE ASSY, 25'	1
29.	32000510	YOKE POWER CABLE	1
30.	32000545	WORM GEAR DRIVE ROTATOR, 7" PLS *P SERIES*	1
	32000896	WORM GEAR DRIVE ROTATOR, GPL *G SERIES*	1
31.	32000856	HEX BOLT, 3/8-16 x 3.50, GRD 8, PL *P SERIES*	8
	32000907	HEX BOLT, 1/2-13 x 3.50, GRD 8, PL *G SERIES*	11
32.	32000558	HEX BOLT, 3/8-16 x 3.00, GRD 8, PL *P SERIES*	2
	32000905	HEX BOLT, 7/16-14 x 3.00, GRD 8 PL *G SERIES*	2
33.	32000907	HEX BOLT, 5/16-18 x .75 GRD 5	1
34.	32000617	GREASE ZERK, 1/8-27, STRAIGHT	2
35.	32000540	HYDRAULIC MOTOR, H SERIES *P SERIES*	1
	32000895	HYDRAULIC MOTOR, *G SERIES*	1
36.	32000265	1/4" WOODRUFF SHAFT KEY	1
37.	32000544	ORING - 4MSAE 4MJIC	2
38.	32000340	REDUCER, INT SAE/EXT SAE, 10-4	2
39.	32000557	HEX BOLT, 1/2-13 x 2, GRD 8, PL	4
40.	32000547	MOUNT ASSY. *P SERIES*	1
	32000898	MOUNT ASSY. *G SERIES*	1
41.	32000556	HEX BOLT, 3/8-16 x 2.75, GRD 8, PL *P SERIES*	8
	32000905	HEX BOLT, 7/16-14 x 3.00, GRD 8 PL *G SERIES*	8
42.	32000033	WIRING HARNESS, UNIVERSAL	1
43.	32000295	CONDUIT NUT, 1"	1
44.	32000034	PENDANT 25' W/BAYONET CONNECTOR	1

32000539 PARTS LIST			
ITEM	IMT PART #	DESCRIPTION	QUANTITY
45.	32000549	VALVE COVER	1
46.	32000471	FLAT WASHER 1/4	11
47.	32000382	PHILLIPS HD SCREW, 6-32 x .50	6
48.	32000066	HEX BOLT, 1/4-20 x .75	7
49.	32000469	LOCK WASHER, 1/4"	4
50.	32000558	HEX BOLT, 3/8-16 x 3 GRD 8 *P SERIES*	1
51.	32000067	HEX BOLT, 1/4-20 x 1	4
52.	32000070	HEX BOLT, 1/4-20 x .50	1
53.	32000654	WASHER, FLAT 3/8 SAE *P SERIES*	9
	32000903	WASHER, FLAT 7/16 SAE *G SERIES*	11
54.	32000476	LOCK WASHER, 3/8"	2
55.	32000078	HEX BOLT, 3/8-16 x 1"	2
56.	32000062	SOCKET BOLT, 1/2-13 x 1.50	2
57.	32000473	LOCK WASHER, 1/2	2
58.	32000553	HEX NUT, 1/2-13, GRD 8	4
59.	32000551	LOWER CONT. ROT. BRKT *P SERIES*	1
	32000900	LOWER CONT. ROT. BRKT *G SERIES*	1
60.	32000550	UPPER CONT. ROT. BRKT. * P SERIES*	1
	32000899	UPPER CONT. ROT. BRKT. *G SERIES*	1
61.	32000243	VAVLE GROUND HARNESS PXTW	1
62.	32000135	48" GROUND CABLE	2
63.	32000826	HIGH AMP FUSE 225 AMP (WAS 200 AMP)	2
64.	32000072	HEX BOLT, 1-8 x 8", GRD 8 PL	1
65.	32000561	GREASE ZERK, 1/8-27, 90°	1
66.	32000562	CONDUIT CLAMP	2
67.	32000286	NUT, NYLON 1/4-20	10
68.	32000655	BOLT, CARRIAGE 1/4-20 x .75	2
69.	32000658	SCREW, DRIVE, #8x 3/8	2
70.	32000644	SERIAL NUMBER PLATE	1
71.	32000134	CABLE, 18" BREAKER TO TRUCK BATT	1
72.	32000077	HEX BOLT, 3/8-16 x .50 GRD 5 *P SERIES*	2
	32000716	HEX BOLT, 1/2-13 x .75 GRD 5 *G SERIES*	2
73.	32000476	LOCK WASHER, 3/8" *P SERIES*	2
	32000473	LOCK WASHER, 1/2" *P SERIES*	2
74.	32000822	HIGH AMP FUSE HOLDER	1
75.	32000904	5/16 LOCK WASHER	1
76.	32000891	WINCH CORD BOOT	1
77.	32000892	GROMMET, RUBBER	1
-	32000552	DECAL SET	1
-	32000563	OPEN GEAR COMPOUND	1
REV 20100816 SN 4338			

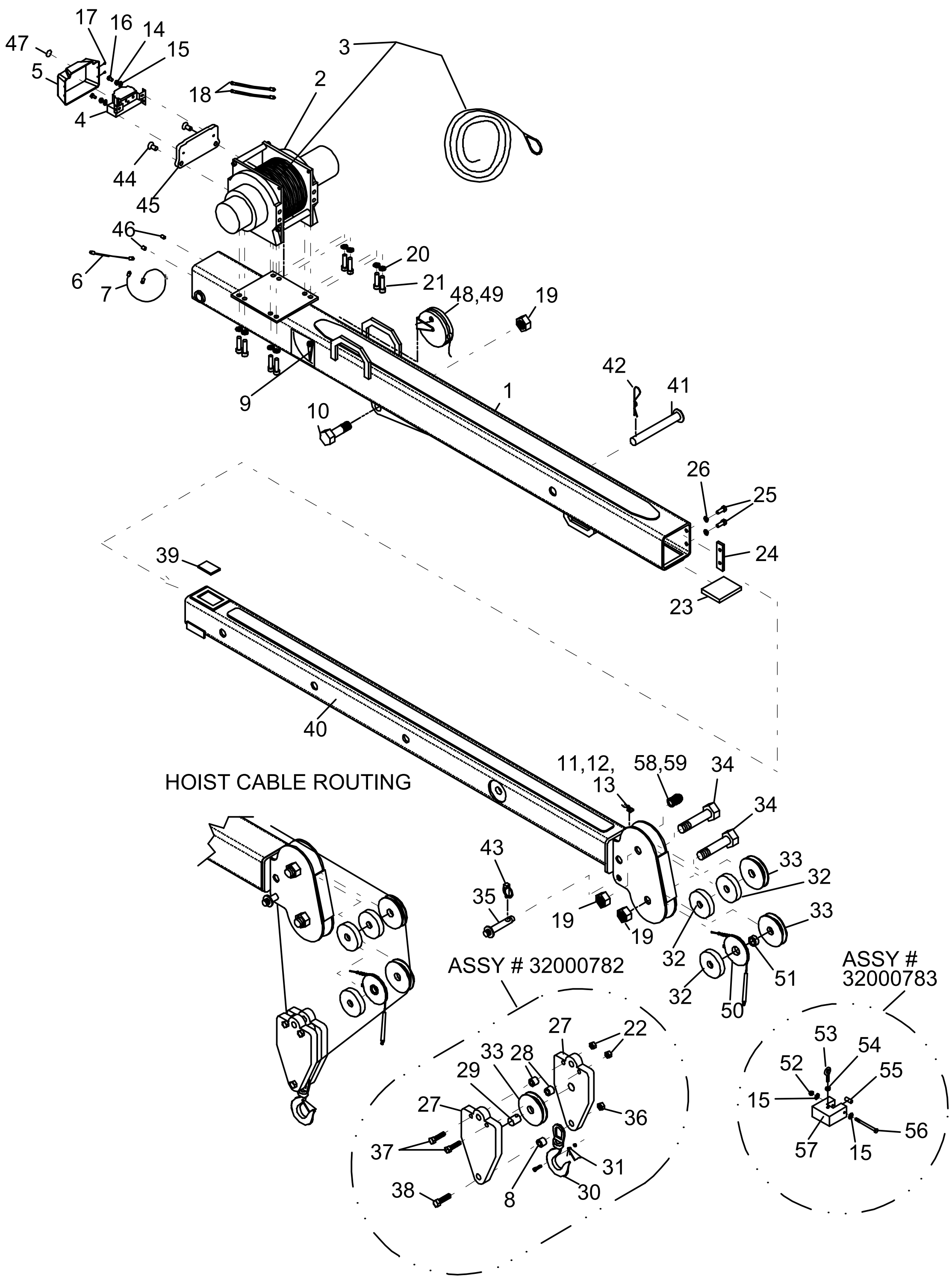
3203i Boom Assembly, Manual (32000778) (Eff S/N 4296)



32000778 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	32000665	XTW OUTER BOOM WELD ASSY	1
2.	32000564	DC2000MF w/PM MTR	1
3.	32000608	WIRE ROPE, 1/4 x 80'	1
4.	32000180	CONTACTOR-12V	1
5.	32000196	WINCH CONTROL COVER	1
6.	32000847	TRAVELING BLOCK SPACER BUSHING	2
7.	32000297	GROMMET, NYLON 1-3/8	1
8.	32000565	TRAVELING BLOCK HOOK BUSHING	1
9.	32000203	BOOM ANGLE INDICATOR KIT	1
10.	32000526	BOOM CYL PIN	1
13.	32000693	PLUG, SHEAVE HEAD (ADDED S/N 4365)	1
14.	32000469	LOCK WASHER, 1/4	4
15.	32000471	FLAT WASHER, 1/4	2
16.	32000070	BOLT, HEX 1/4-20 x 1/2"	2
17.	32000796	PAN HEAD SCREW, 10-24 x 1/2	2
18.	32000145	WINCH MOTOR CABLE	2
19.	32000289	NUT, NYLON LOCK 1-8 plated	3
20.	32000571	LOCK WASHER, M12	8
21.	32000570	BOLT, SOCKET M12-1.75 x 30mm	8
22.	32000284	NUT, NYLON LOCK 1/2-13	2
23.	32000410	SLIDE PAD, XT BOOM	1
24.	32000883	BOOM RETAINER, L4, L32	1
25.	32000077	BOLT, HEX 3/8-16 x 1/2"	2
26.	32000476	WASHER, LOCK, 3/8"	2
27.	32000528	TRAVELING BLOCK SIDE PLATE	2
28.	32000421	TRAVELING BLOCK SPACER	2
29.	32000055	TRAVELING BLOCK AXLE	1
30.	32000436	SWIVEL HOOK 2T	1
31.	32000367	SAFETY LATCH 2T	1
32.	32000884	SHEAVE SPACER 3/4" W/GROOVE (WAS 32000394 THRU S/N 4364)	1
33.	32000037	WIRE ROPE PULLEY 5"	3
34.	32000527	BOLT, SHEAVE AXLE (WAS 32000771 THRU S/N 4364)	2
35.	32000536	ROPE ACHOR PIN	1
36.	32000291	NUT, NYLON LOCK 3/4-10	1
37.	32000065	BOLT, HEX, 1/2-13x3.5	2
38.	32000073	BOLT, HEX 3/4-10 x 3-3/4	1
39.	32000481	WEAR PAD 1/4	1
40.	32000648	INNER BOOM (WAS 32000583 THRU S/N 4364)	1
41.	32000886	RING PIN, 3/4x6	1
42.	32000425	SPRING COTTER PIN	1
43.	32000537	QUICK PIN	2
44.	32000566	BOLT FLAT HD SCKT, M12-1.75 x 25mm	2
45.	32000567	BRACKET, CONTACTOR DC2000	1
46.	32000572	GREASE ZERK INSERT	2
47.	32000616	PLUG, 7/8 FLUSH BUTTON	1
48.	32000025	REEL & CORD ASSY	1

32000778 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
49.	32000372	SCREW, TEK #10 x .75	2
50.	32000882	L32/L4 A2B w/SWITCH ARM	1
58.	32000189	CORD GRIP	1
59.	32000694	NUT, CONDUIT CONNECTOR 1/2"	1
REV 20080515 S/N 4365			

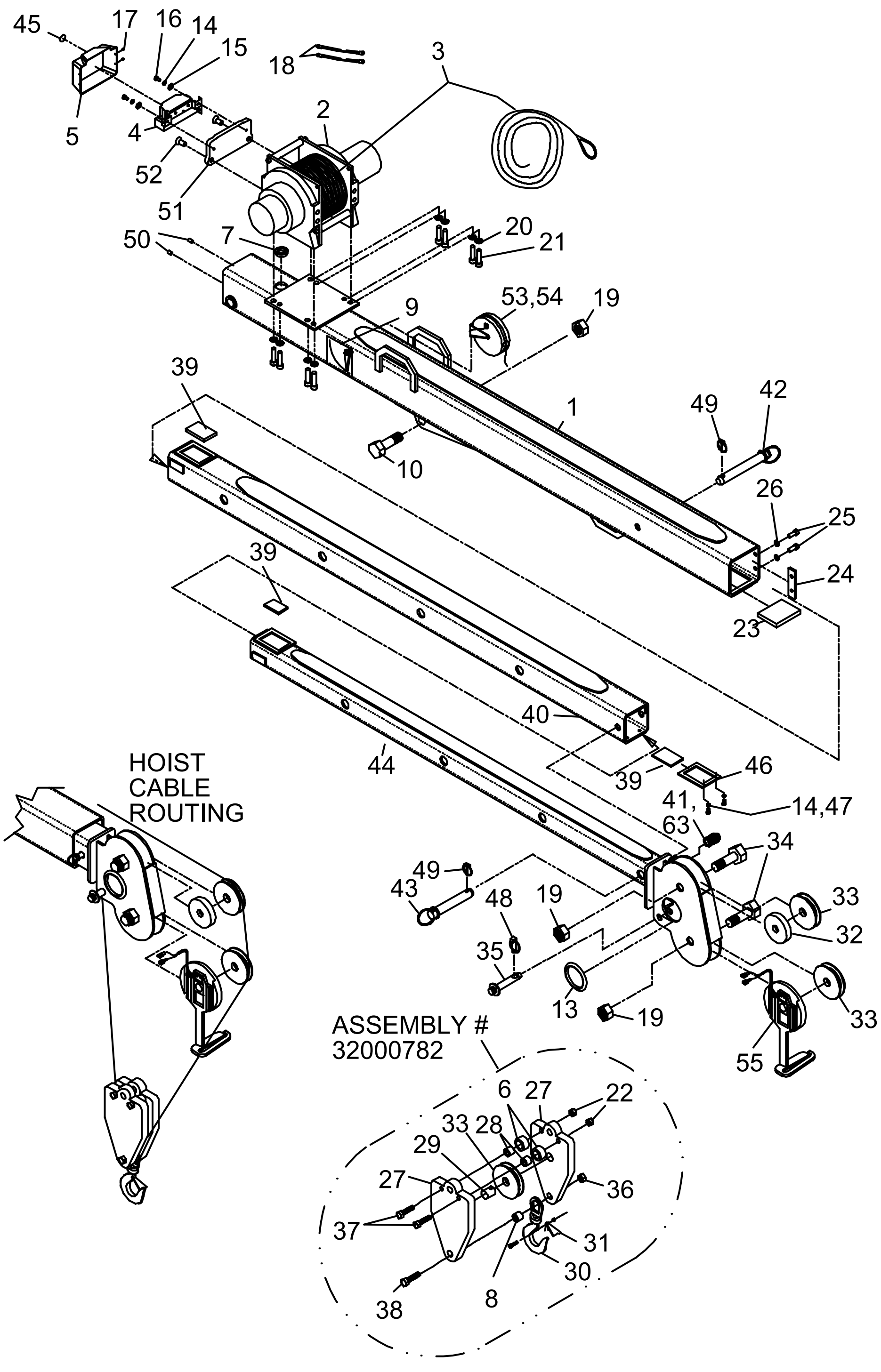
3203i Boom Assembly, Manual (32000778) (Eff S/N 3726)



32000778 PARTS LIST (EFFECTIVE S/N 3726)			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	32000530	OUTER BOOM WELD ASSY	1
2.	32000564	DC2000MF w/PM MTR	1
3.	32000569	WIRE ROPE, 7/32 x 65'	1
4.	32000180	CONTACTOR-12V	1
5.	32000196	WINCH CONTROL COVER	1
6.	32000237	WINCH GND CABLE	1
7.	32000157	WINCH PWR CABLE	1
8.	32000565	TRAVELING BLOCK HOOK BUSHING	1
9.	32000203	BOOM ANGLE INDICATOR KIT	1
10.	32000526	BOOM CYL PIN	1
11.	32000435	A-2-B MAGNETIC SWITCH	1
12.	32000294	NUT, HEX 6-32	2
13.	32000722	SCREW, RD HD 6-32x 1/2"	2
14.	32000469	LOCK WASHER, 1/4	4
15.	32000471	FLAT WASHER, 1/4	4
16.	32000070	BOLT, HEX 1/4-20 x 1/2"	2
17.	32000070	PAN HEAD SCREW, 10-32x 1/2	2
18.	32000145	WINCH MOTOR CABLE	2
19.	32000289	NUT, NYLON LOCK 1-8 plated	3
20.	32000571	LOCK WASHER, M12	8
21.	32000570	BOLT, SOCKET M12-1.75 x 30mm	8
22.	32000284	NUT, NYLON LOCK 1/2-13	2
23.	32000410	SLIDE PAD, XT BOOM	1
24.	32000350	RETAINER	1
25.	32000078	BOLT, HEX 3/8-16 x 1.0	2
26.	32000476	WASHER, LOCK, 3/8"	2
27.	32000528	TRAVELING BLOCK SIDE PLATE	2
28.	32000421	TRAVELING BLOCK SPACER	2
29.	32000055	TRAVELING BLOCK AXLE	1
30.	32000436	SWIVEL HOOK 2T	1
31.	32000367	SAFETY LATCH 2T	1
32.	32000394	SHEAVE SPACER .70	4
33.	32000037	WIRE ROPE PULLEY 5"	3
34.	32000771	BOLT, SHEAVE AXLE, WIDE SHEAVE HD.	2
35.	32000536	ROPE ACHOR PIN	1
36.	32000291	NUT, NYLON LOCK 3/4-10	1
37.	32000065	BOLT, HEX, 1/2-13x3.5	2
38.	32000073	BOLT, HEX 3/4-10 x 3-3/4	1
39.	32000481	WEAR PAD 1/4	3
40.	32000583	BOOM EXTENSION	1
41.	32000584	XTW LOCKING PIN	1
42.	32000425	SPRING COTTER PIN	1
43.	32000537	QUICK PIN	1
44.	32000566	BOLT FLAT HD SCKT, M12-1.75 x 25mm	2
45.	32000567	BRACKET, CONTACTOR DC2000	1
46.	32000572	GREASE ZERK INSERT	2
47.	32000616	PLUG, 7/8 FLUSH BUTTON	1
48.	32000025	REEL, 7/8 FLUSH BUTTON	1
49.	32000372	SCREW, TEK #10 x .75	2
50.	32000534	A-2-B DESK ASSY	1
51.	32000120	A-2-B BUSHING	1

32000778 PARTS LIST (EFFECTIVE S/N 3726)			
ITEM	PART #	DESCRIPTION	QUANTITY
52.	32000286	NUT, NYLON LOCK 1/4-20	1
53.	32000229	EYEBOLT, E1 BENT	1
54.	32000285	NUT, HEX 1/4-20	1
55.	32000122	A-2-B WEIGHT, ROLLER BUSHING	1
56.	32000573	BOLT, HEX, 1/4-20 x 3.50	1
57.	32000488	A-2-B WEIGHT	1
58.	32000189	CORD GRIP	1
59.	32000694	NUT, CONDUIT CONNECTOR 1/2"	1
S/N 3726 THROUGH 4296			

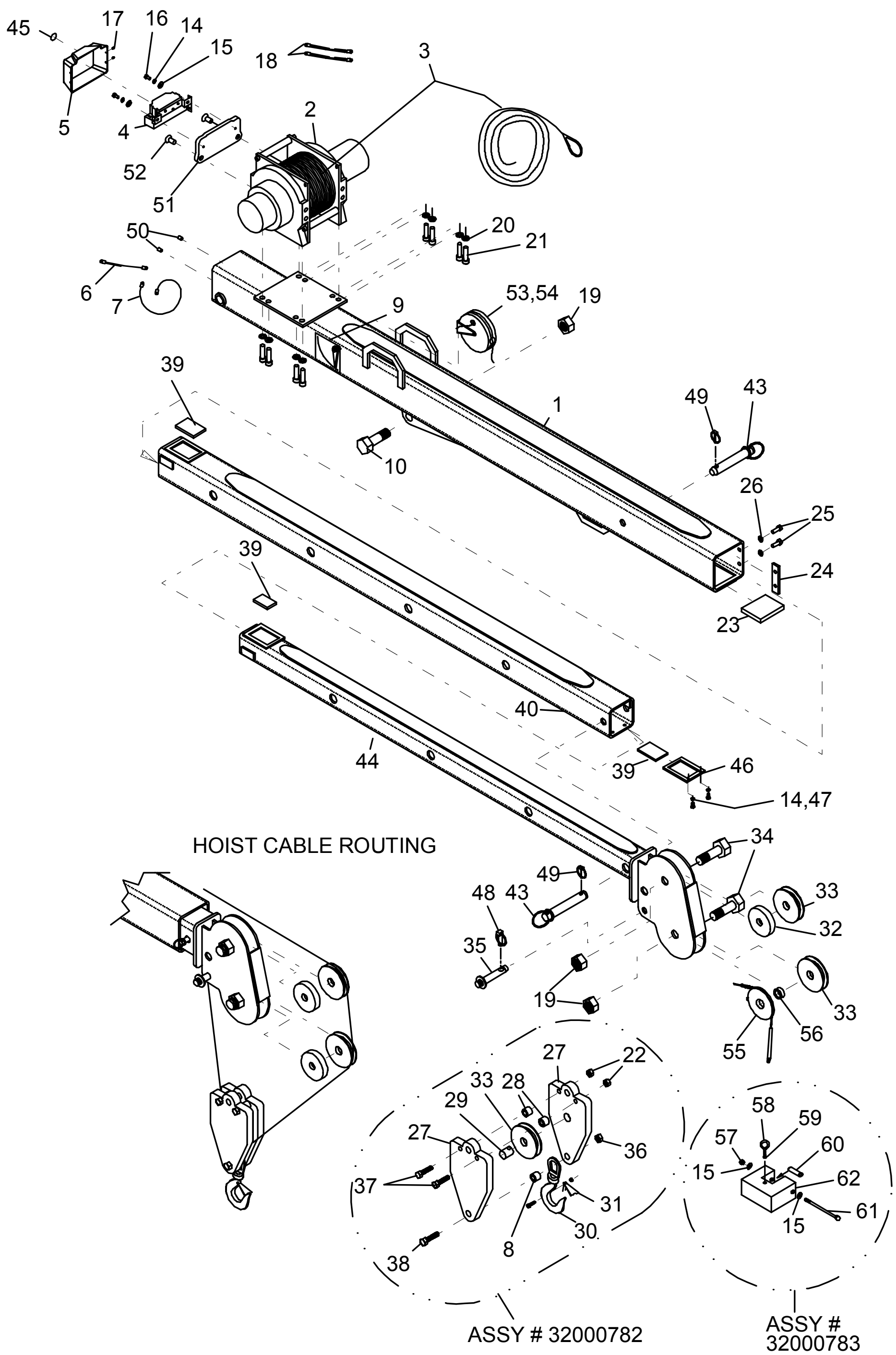
3203i Boom Assembly, Manual, 15' (32000659) (Eff S/N 4296)



32000659 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	32000581	OUTER BOOM, XTW-15	1
2.	32000564	DC2000MF w/PM MTR	1
3.	32000608	WIRE ROPE, 1/4 x 80'	1
4.	32000180	CONTACTOR-12V	1
5.	32000196	WINCH CONTROL COVER	1
6.	32000847	TRAVELING BLOCK SPACER BUSHING	2
7.	32000297	GROMMET, NYLON 1-3/8	1
8.	32000565	TRAVELING BLOCK HOOK BUSHING	1
9.	32000203	BOOM ANGLE INDICATOR KIT	1
10.	32000526	BOOM CYL PIN	1
13.	32000693	PLUG, SHEAVE HEAD (ADDED S/N 4320)	1
14.	32000469	LOCK WASHER, 1/4	4
15.	32000471	FLAT WASHER, 1/4	2
16.	32000070	BOLT, HEX 1/4-20 x 1/2"	2
17.	32000796	PAN HEAD SCREW, 10-24 x 1/2	2
18.	32000145	WINCH MOTOR CABLE	2
19.	32000289	NUT, NYLON LOCK 1-8 plated	3
20.	32000571	LOCK WASHER, M12	8
21.	32000570	BOLT, SOCKET M12-1.75 x 30mm	8
22.	32000284	NUT, NYLON LOCK 1/2-13	2
23.	32000410	SLIDE PAD, XT BOOM	1
24.	32000883	BOOM RETAINER, L4, L32	1
25.	32000885	BOLT, HEX 3/8-16 x 1/2"	2
26.	32000476	WASHER, LOCK, 3/8"	2
27.	32000528	TRAVELING BLOCK SIDE PLATE	2
28.	32000421	TRAVELING BLOCK SPACER	2
29.	32000055	TRAVELING BLOCK AXLE	1
30.	32000436	SWIVEL HOOK 2T	1
31.	32000367	SAFETY LATCH 2T	1
32.	32000884	SHEAVE SPACER 3/4, w/GROOVE	1
33.	32000037	WIRE ROPE PULLEY 5"	3
34.	32000527	BOLT, SHEAVE AXLE	2
35.	32000536	ROPE ACHOR PIN	1
36.	32000291	NUT, NYLON LOCK 3/4-10	1
37.	32000065	BOLT, HEX, 1/2-13x3.5	2
38.	32000073	BOLT, HEX 3/4-10 x 3-3/4	1
39.	32000481	WEAR PAD 1/4	3
40.	32000583	XTW15 INTERM. BOOM	1
41.	32000189	CORD GRIP 1/2"	1
42.	32000886	RING PIN, 3/4 x 6"	1
43.	32000320	RING PIN, 3/4 x 4.5	1
44.	32000585	XTW-15 PULLOUT BOOM EXTENSION	1
45.	32000616	PLUG, 7/8 FLUSH BUTTON	1
46.	32000529	WEAR PAD BRACKET	1
47.	32000066	HEX BOLT, 1/4-20 X .75	2
48.	32000537	QUICK PIN	1
49.	32000324	LYNCH PIN	2
50.	32000572	GREASE ZERK INSERT	2

32000659 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
51.	32000567	BRACKET, CONTACTOR DC2000	1
52.	32000566	BOLT, FLAT SOCKET, M12-1.75 x 25mm	2
53.	32000025	REEL, A2B	1
54.	32000372	SCREW, TEK #10 x .75	2
55.	32000882	L32/L4 A2B w/SWITCH ARM	1
63.	32000694	NUT, CONDUIT CONNECTOR 1/2"	1
REV. 20080515 S/N 4320			

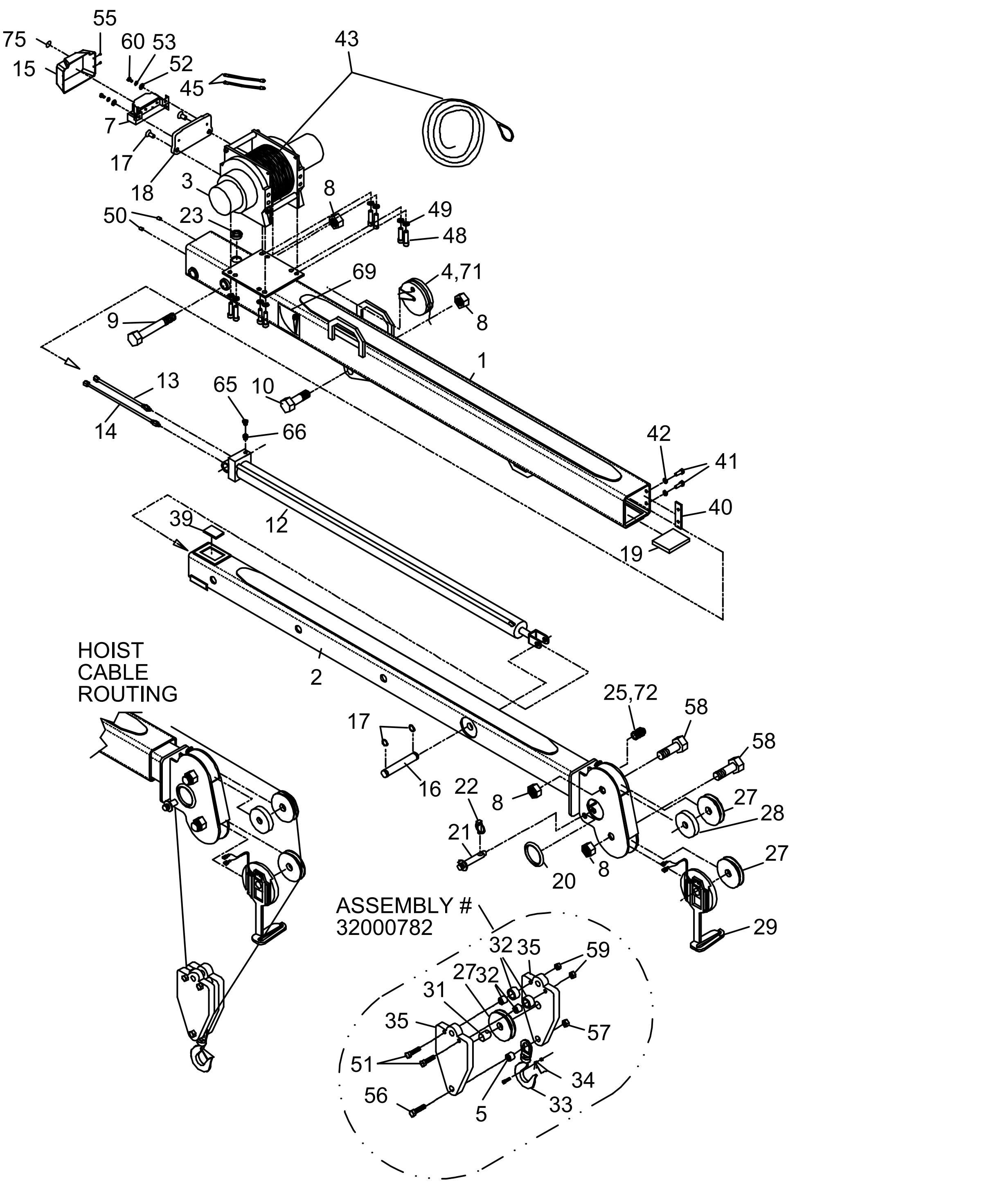
3203i Boom Assembly, Manual, 15' (32000659) (Eff S/N 3738)



32000659 (S/N 3738) PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	32000581	OUTER BOOM, XTW-15	1
2.	32000564	DC2000MF w/PM MTR	1
3.	32000569	WIRE ROPE, 7/32 x 65'	1
4.	32000180	CONTACTOR-12V	1
5.	32000196	WINCH CONTROL COVER	1
6.	32000237	WINCH GND CABLE	1
7.	32000157	WINCH PWR CABLE	1
8.	32000565	TRAVELING BLOCK HOOK BUSHING	1
9.	32000203	BOOM ANGLE INDICATOR KIT	1
10.	32000526	BOOM CYL PIN	1
11.		-	-
12.		-	-
13.		-	-
14.	32000469	LOCK WASHER, 1/4	4
15.	32000471	FLAT WASHER, 1/4	4
16.	32000070	BOLT, HEX 1/4-20 x 1/2"	2
17.	32000070	PAN HEAD SCREW, 10-32x 1/2	2
18.	32000145	WINCH MOTOR CABLE	2
19.	32000289	NUT, NYLON LOCK 1-8 plated	3
20.	32000571	LOCK WASHER, M12	8
21.	32000570	BOLT, SOCKET M12-1.75 x 30mm	8
22.	32000284	NUT, NYLON LOCK 1/2-13	2
23.	32000410	SLIDE PAD, XT BOOM	1
24.	32000350	RETAINER	1
25.	32000078	BOLT, HEX 3/8-16 x 1.0	2
26.	32000476	WASHER, LOCK, 3/8"	2
27.	32000528	TRAVELING BLOCK SIDE PLATE	2
28.	32000421	TRAVELING BLOCK SPACER	2
29.	32000055	TRAVELING BLOCK AXLE	1
30.	32000436	SWIVEL HOOK 2T	1
31.	32000367	SAFETY LATCH 2T	1
32.	32000394	SHEAVE SPACER 3/4	1
33.	32000037	WIRE ROPE PULLEY 5"	3
34.	32000527	BOLT, SHEAVE AXLE	2
35.	32000536	ROPE ACHOR PIN	1
36.	32000291	NUT, NYLON LOCK 3/4-10	1
37.	32000065	BOLT, HEX, 1/2-13x3.5	2
38.	32000073	BOLT, HEX 3/4-10 x 3-3/4	1
39.	32000481	WEAR PAD 1/4	3
40.	32000583	XTW15 INTERM. BOOM	1
41.			
42.			
43.	32000320	RING PIN, 3/4 x 4.5	2
44.	32000585	XTW-15 PULLOUT BOOM EXTENSION	1
45.	32000616	PLUG, 7/8 FLUSH BUTTON	1
46.	32000529	WEAR PAD BRACKET	1
47.	32000066	HEX BOLT, 1/4-20 X .75	2
48.	32000537	QUICK PIN	1

32000659 (S/N 3738) PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
49.	32000324	LYNCH PIN	2
50.	32000572	GREASE ZERK INSERT	2
51.	32000567	BRACKET, CONTACTOR DC2000	1
52.	32000566	BOLT, FLAT SOCKET, M12-1.75 x 25mm	2
53.	32000025	REEL, A2B	1
54.	32000372	SCREW, TEK #10 x .75	2
55.	32000534	A-2-B DESK ASSY	1
56.	32000120	A-2-B BUSHING	1
57.	32000286	NUT, NYLON LOCK, 1/4-20	1
58.	32000229	EYEBOLT, E1 BENT	1
59.	32000285	NUT, HEX 1/4-20	1
60.	32000122	A-2-B WEIGHT, ROLLER BUSHING	1
61.	32000573	BOLT, HEX, 1/4-20 x 3.50	1
62.	32000488	A-2-B WEIGHT	1
EFF S/N 3738			

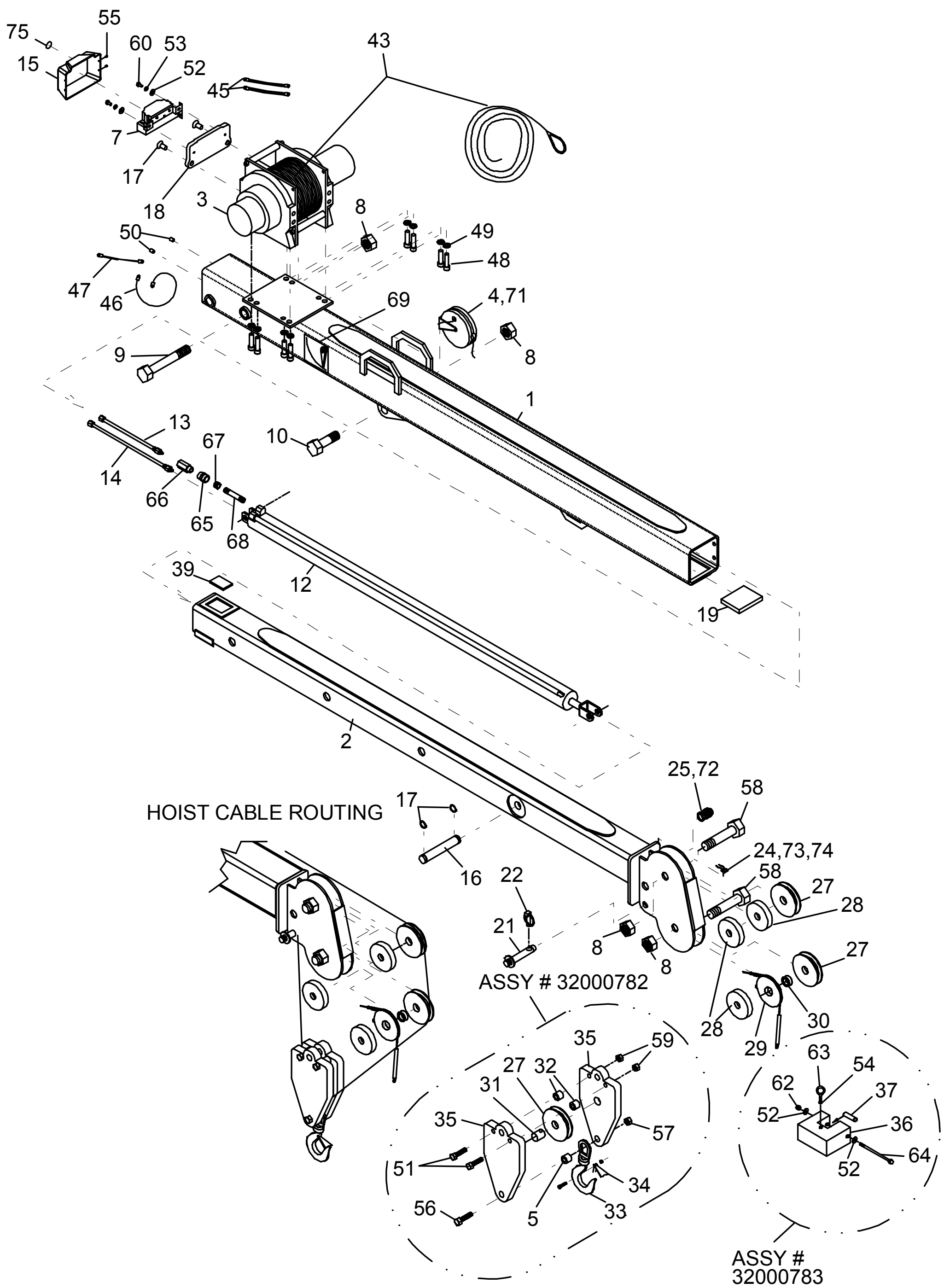
3203i Boom Assembly, Hydraulic (32000780) (Eff. Jan 2008)



32000780 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	32000530	OUTER BOOM, WELD ASSY	1
2.	32000648	BOOM, PULLOUT (WAS 32000772 THRU S/N 4364)	1
3.	32000564	DC2000MF w/PM MTR	1
4.	32000025	REEL, A2B	1
5.	32000565	TRAVELING BLOCK HOOK BUSHING	1
6.	32000847	TRAVELING BLOCK SPACER BUSHING	2
7.	32000180	CONTACTOR-12V	1
8.	32000289	NUT, NYLON LCK 1-8 plated	4
9.	32000226	EXTENSION CYLINDER PIN	1
10.	32000526	L32, BOLT, BOOM CYLINDER PIN	1
11.	32000566	BOLT, FLAT SOCKET, M12-1.75 x 25mm	2
12.	32000225	EXTENSION CYLINDER	1
13.	32000924	HOSE, 1/4 MNPT X FJIC X 23.5" (WAS 32000525 THRU S/N 4319)	1
14.	32000696	HYD HOSE, 1/4" 4FJIC x 4FJIC 25" (WAS 32000249 THRU S/N 4319)	1
15.	32000196	WINCH CONTROL COVER	1
16.	32000779	CYLINDER PIN 1" x 4" EFF LG 5-5/8	1
17.	32000363	1" ZINC PLTD SNAP RING	2
18.	32000567	BRACKET, CONTACTOR, DC2000	1
19.	32000410	SLIDE PAD, XT BOOM	1
20.	32000693	PLUG, SHEAVE HEAD (EFF S/N 4365)	1
21.	32000536	ROPE ANCHOR PIN	1
22.	32000537	QUICK PIN	1
23.	32000297	GROMMET, NYLON 1-3/8	1
25.	32000189	CORD GRIP 1/2"	1
27.	32000037	WIRE ROPE PULLEY, 5"	3
28.	32000394	SHEAVE SPACER 3/4" w/GROOVE (WAS 3 THRU S/N 4364)	1
29.	32000882	L32/L4 A2B w/SWITCH ARM	1
31.	32000055	TRAV. BLOCK AXLE	1
32.	32000421	TRAV. BLOCK SPACER	2
33.	32000436	SWIVEL HOOK 2T	1
34.	32000367	SAFETY LATCH 2T	1
35.	32000528	TRAV. BLOCK SIDE PLATE	2
39.	32000481	WEAR PAD 1/4"	2
40.	32000883	BOOM RETAINER, L4, L32	1
41.	32000077	BOLT, 3/8-16 X .50 HEX (WAS 32000885 THRU S/N 4319)	2
42.	32000476	WASHER, LOCK, 3/8	2
43.	32000608	WIRE ROPE, 1/4 x 80'	1
45.	32000145	WINCH MTR CABLE	2
48.	32000570	BOLT, SOCKET M12-1.75 x 30mm	8
49.	32000571	LOCK WASHER, M12	8
50.	32000572	GREASE ZERK INSERT	2
51.	32000572	BOLT, HEX, 1/2-13x3.5	2
52.	32000471	FLAT WASHER, 1/4"	2
53.	32000469	LOCK WASHER, 1/4"	2
55.	32000796	PAN HEAD SCREW, 10-24 x 1/2"	2

32000780 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
56.	32000073	BOLT, HEX, 3/4-10 x 3-3/4"	1
57.	32000291	NUT, NYLON LOCK 3/4-10	1
58.	32000527	BOLT, SHEAVE AXLE (WAS 32000771 THRU S/N 4364)	2
59.	32000284	NUT, NYLON LOCK 1/2-13	2
60.	32000070	BOLT, HEX, 1/4-20x.50	2
65.	32000574	COUPLING	1
66.	32000575	VELOCITY FUSE	1
67.	32000331	PLUG, 6SAE ALLEN HEAD (WAS 32000576 THRU S/N 4319)	1
68.	32000925	FUSE, VELOCITY (WAS 32000577 THRU S/N 4319)	1
69.	32000203	BOOM ANGLE INDICATOR KIT	1
71.	32000372	SCREW, TEK #10 x .75	2
72.	32000694	NUT, CONDUIT CONNECTOR 1/2"	1
75.	32000616	PLUG, 7/8 FLUSH BUTTON	1
REV 20080515 S/N 4365			

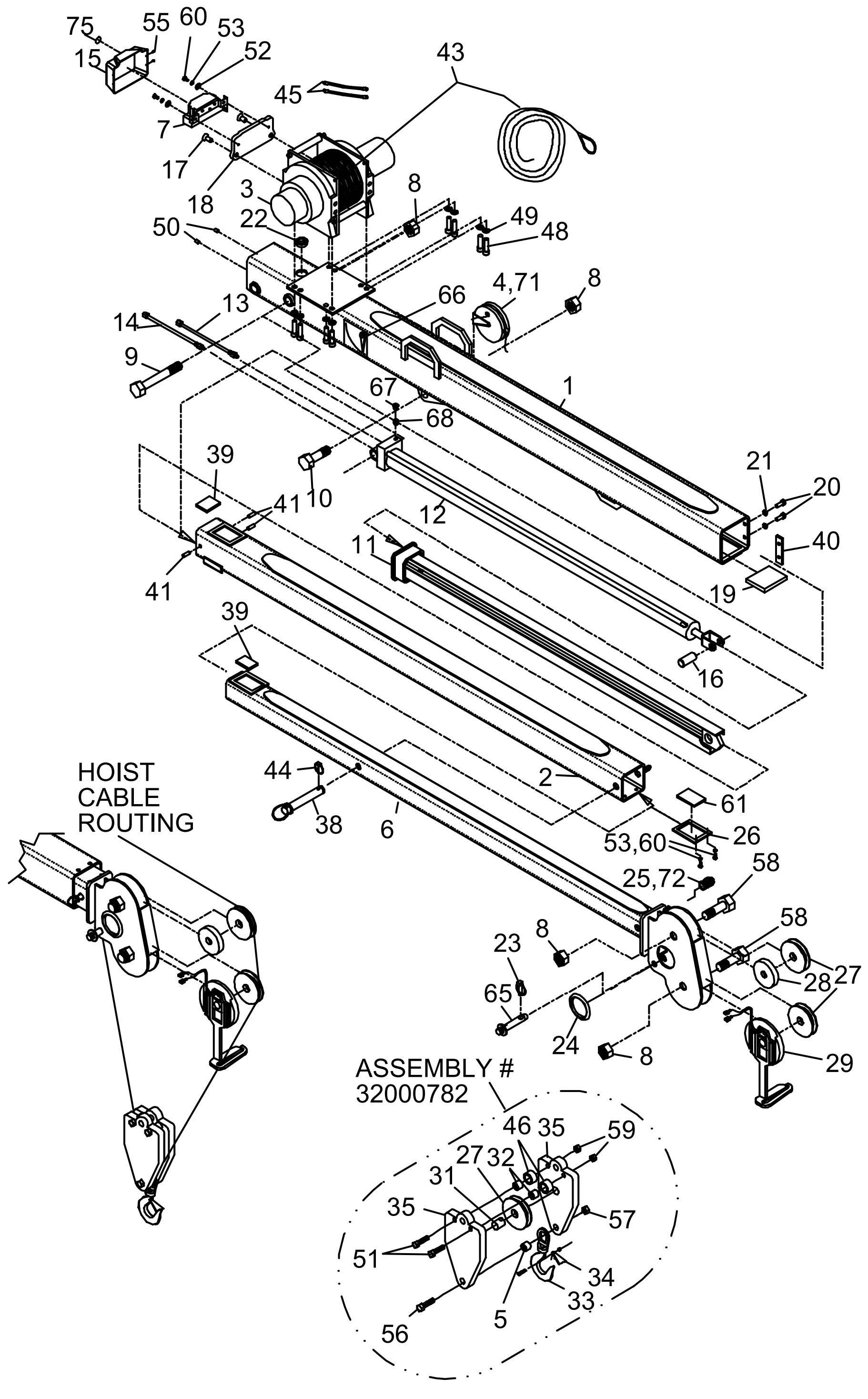
3203i Boom Assembly, Hydraulic (32000780) (Eff Jan 2006)



32000780 (EFF. JAN 2006) PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	32000530	OUTER BOOM, WELD ASSY	1
2.	32000772	LIB 32 BOOM EXTENSION	1
3.	32000564	DC2000MF w/PM MTR	1
4.	32000025	REEL, A2B	1
5.	32000565	TRAVELING BLOCK HOOK BUSHING	1
6.		-	-
7.	32000180	CONTACTOR-12V	1
8.	32000289	NUT, NYLON LCK 1-8 plated	4
9.	32000226	EXTENSION CYLINDER PIN	1
10.	32000526	L32, BOLT, BOOM CYLINDER PIN	1
11.	32000566	BOLT, FLAT SOCKET, M12-1.75 x 25mm	2
12.	32000225	EXTENSION CYLINDER	1
13.	32000525	HOSE, 1/4MNPTx4FJIC x 22"	1
14.	32000249	HOSE, 1/4MNPTx4FJIC x 25"	1
15.	32000196	WINCH CONTROL COVER	1
16.	32000779	CYLINDER PIN 1" x 4" EFF LG 5-5/8	1
17.	32000363	1" ZINC PLTD SNAP RING	2
18.	32000567	BRACKET, CONTACTOR, DC2000	1
19.	32000410	SLIDE PAD, XT BOOM	1
20.		-	-
21.	32000536	ROPE ANCHOR PIN	1
22.	32000537	QUICK PIN	1
23.		-	-
24.	32000435	A-2-B MAGNETIC SWITCH	1
25.	32000189	CORD GRIP 1/2"	1
26.		-	-
27.	32000037	WIRE ROPE PULLEY, 5"	3
28.	32000394	SHEAVE SPACER 3/4"	3
29.	2000534	A-2-B DISK ASSY	1
30.	32000120	A-2-B-BUSHING	1
31.	32000055	TRAV. BLOCK AXLE	1
32.	32000421	TRAV. BLOCK SPACER	2
33.	32000436	SWIVEL HOOK 2T	1
34.	32000367	SAFETY LATCH 2T	1
35.	32000528	TRAV. BLOCK SIDE PLATE	2
36.	32000488	A-2-B WEIGHT	1
37.	32000122	A-2-B WEIGHT, ROLLER BUSH.	1
38.		-	-
39.	32000481	WEAR PAD 1/4"	2
40.		-	-
41.		-	-
42.		-	-
43.	32000569	WIRE ROPE, 7/32 x 65'	1
44.		-	-
45.	32000145	WINCH MTR CABLE	2
46.	32000157	WINCH PWR CABLE	1
47.	32000237	WINCH GND CABLE	1
48.	32000570	BOLT, SOCKET M12-1.75 x 30mm	8
49.	32000571	LOCK WASHER, M12	8
50.	32000572	GREASE ZERK INSERT	2
51.	32000572	BOLT, HEX, 1/2-13x3.5	2

32000780 (EFF. JAN 2006) PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
52.	32000471	FLAT WASHER, 1/4"	4
53.	32000469	LOCK WASHER, 1/4"	2
54.	32000285	HEX NUT, 1/4-20	1
55.	32000375	PAN HEAD SCREW, 10-32 x 1/2"	2
56.	32000073	BOLT, HEX, 3/4-10 x 3-3/4"	1
57.	32000291	NUT, NYLON LOCK 3/4-10	1
58.	32000527	L32, BOLT, SHEAVE AXLE	2
59.	32000284	NUT, NYLON LOCK 1/2-13	2
60.	32000070	BOLT, HEX, 1/4-20x.50	2
61.		-	-
62.	32000286	NUT, NYLON LOCK, 1/4-20	1
63.	32000229	EYE-BOLT E1-BENT	1
64.	32000573	BOLT, HEX, 1/4-20 x 3.50	1
65.	32000574	COUPLING	1
66.	32000575	VELOCITY FUSE	1
67.	32000576	REDUCER BUSHING	1
68.	32000577	1/4 x 3, NIPPLE	1
69.	32000203	BOOM ANGLE INDICATOR KIT	1
70.		-	-
71.	32000372	SCREW, TEK #10 x .75	2
72.	32000694	NUT, CONDUIT CONNECTOR 1/2"	1
73.	32000722	SCREW, RD HD 6-32 x 1/2"	2
74.	32000294	NUT, HEX 6-32	2
75.	32000616	PLUG, 7/8 FLUSH BUTTON	1

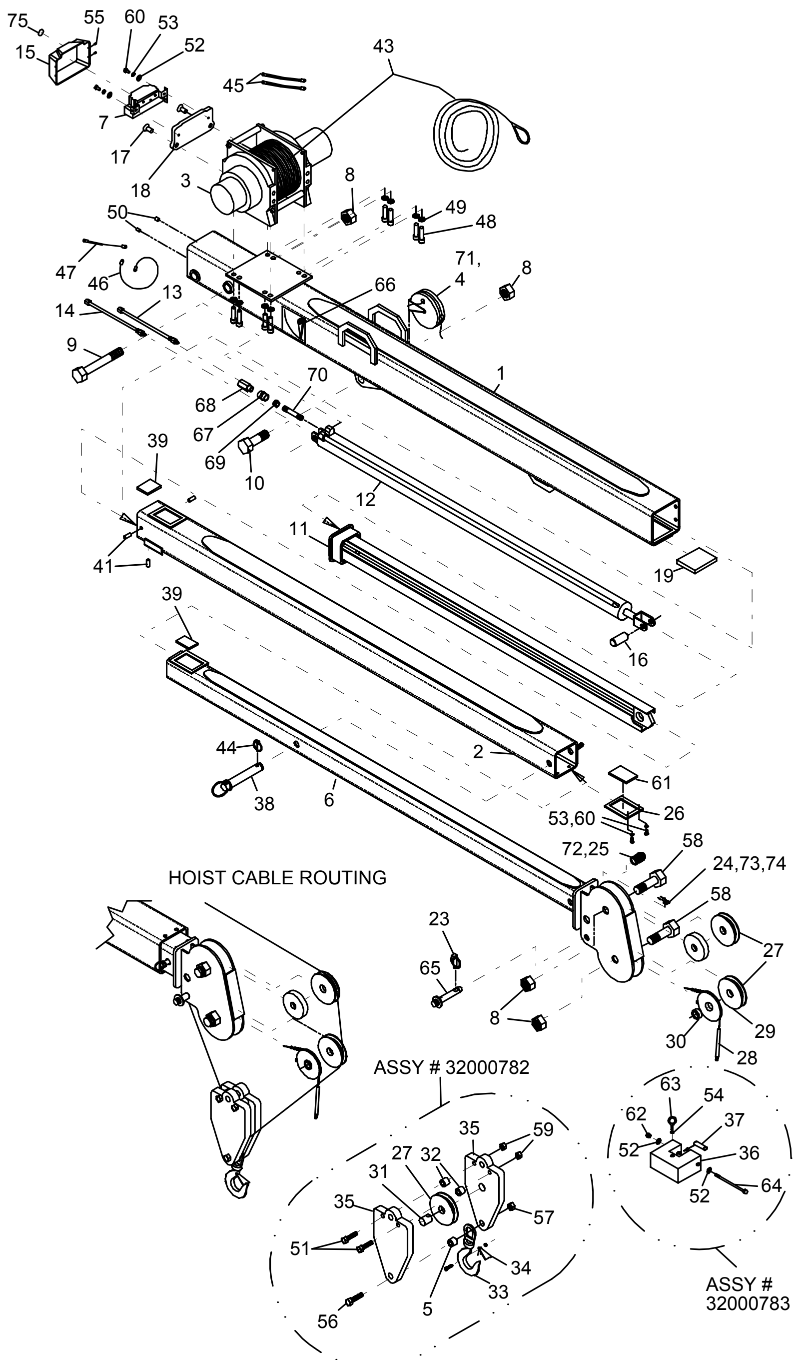
3203i Boom Assembly, Hydraulic-Manual, 15' (32000538) (Eff S/N 4296)



32000538 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	32000530	OUTER BOOM, WELD ASSY	1
2.	32000531	INTERMEDIATE BOOM, WELD ASSY	1
3.	32000564	DC2000MF w/PM MTR	1
4.	32000025	REEL, A2B	1
5.	32000565	TRAVELING BLOCK HOOK BUSHING	1
6.	32000533	INNER BOOM, WELD ASSY	1
7.	32000180	CONTACTOR-12V	1
8.	32000289	NUT, NYLON LCK 1-8 plated	4
9.	32000777	HEX BOLT, 1-8 x 7 grd 8	1
10.	32000526	L32, BOLT, BOOM CYLINDER PIN	1
11.	32000532	THRUST TUBE, WELD ASSY	1
12.	32000225	EXTENSION CYLINDER	1
13.	32000924	HOSE, 1/4 MNPT X FJIC X 23.5" (WAS 32000525 THRU S/N 4319)	1
14.	32000696	HYD HOSE, 1/4" 4FJIC x 4FJIC 25" (WAS 32000249 THRU S/N 4319)	1
15.	32000196	WINCH CONTROL COVER	1
16.	32000327	THRUST LINK PIN 1x1.87	1
17.	32000566	BOLT, FLAT SOCKET, M12-1.75 x 25mm	2
18.	32000567	BRACKET, CONTACTOR, DC2000	1
19.	32000410	SLIDE PAD, XT BOOM	1
20.	32000077	BOLT, HEX 3/8-16 x 1/2"	2
21.	32000476	WASHER, LOCK 3/8	2
22.	32000297	GROMMET, NYLON 1-3/8	1
23.	32000537	QUICK PIN	1
24.	32000693	PLUG, SHEAVE HEAD	1
25.	32000189	CORD GRIP 1/2"	1
26.	32000529	PAD RETAINER	1
27.	32000037	WIRE ROPE PULLEY, 5"	3
28.	32000884	SHEAVE SPACER 3/4" w/GROOVE	1
29.	32000882	ANTI-TWO-BLOCK ASM w/SWITCH ARM	1
31.	32000055	TRAV. BLOCK AXLE	1
32.	32000421	TRAV. BLOCK SPACER	2
33.	32000436	SWIVEL HOOK 2T	1
34.	32000367	SAFETY LATCH 2T	1
35.	32000528	TRAV. BLOCK SIDE PLATE	2
38.	32000320	RING PIN, 3/4 x 4.5	1
39.	32000481	WEAR PAD 1/4"	2
40.	32000883	BOOM RETAINER L4, L32	1
41.	32000568	PIN, THRUST TUBE LOCKING	3
43.	32000608	WIRE ROPE, 1/4 x 80'	1
44.	32000324	LYNCH PIN	1
45.	32000145	WINCH MTR CABLE	2
46.	32000847	TRAVELING BLOCK SPACER BUSHING	2
48.	32000570	BOLT, SOCKET M12-1.75 x 30mm	8
49.	32000571	LOCK WASHER, M12	8
50.	32000572	GREASE ZERK INSERT	2
51.	32000572	BOLT, HEX, 1/2-13x3.5	2
52.	32000471	FLAT WASHER, 1/4" (WAS 4)	2

32000538 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
53.	32000469	LOCK WASHER, 1/4"	2
55.	32000375	PAN HEAD SCREW, 10-24 x 1/2"	2
56.	32000073	BOLT, HEX, 3/4-10 x 3-3/4"	1
57.	32000291	NUT, NYLON LOCK 3/4-10	1
58.	32000527	L32, BOLT, SHEAVE AXLE	2
59.	32000284	NUT, NYLON LOCK 1/2-13	2
60.	32000070	BOLT, HEX, 1/4-20x.50	4
61.	32000646	WEAR PAD, NYLATRON, SHAVED	1
65.	32000536	ROPE PIN	1
66.	32000024	BOOM ANGLE INDICATOR KIT	1
67.	32000331	PLUG, 6SAE ALLEN HEAD (WAS 32000576 THRU S/N 4319)	1
68.	32000925	FUSE, VELOCITY (WAS 32000577 THRU S/N 4319)	1
69.	32000576	REDUCER BUSHING	1
70.	32000577	1/4 x 3, NIPPLE	1
71.	32000372	SCREW, TEK #10 x .75	2
72.	32000694	NUT, CONDUIT CONNECTOR 1/2"	1
75.	32000616	PLUG, 7/8 FLUSH BUTTON	1
REV 20080515 S/N 4320			

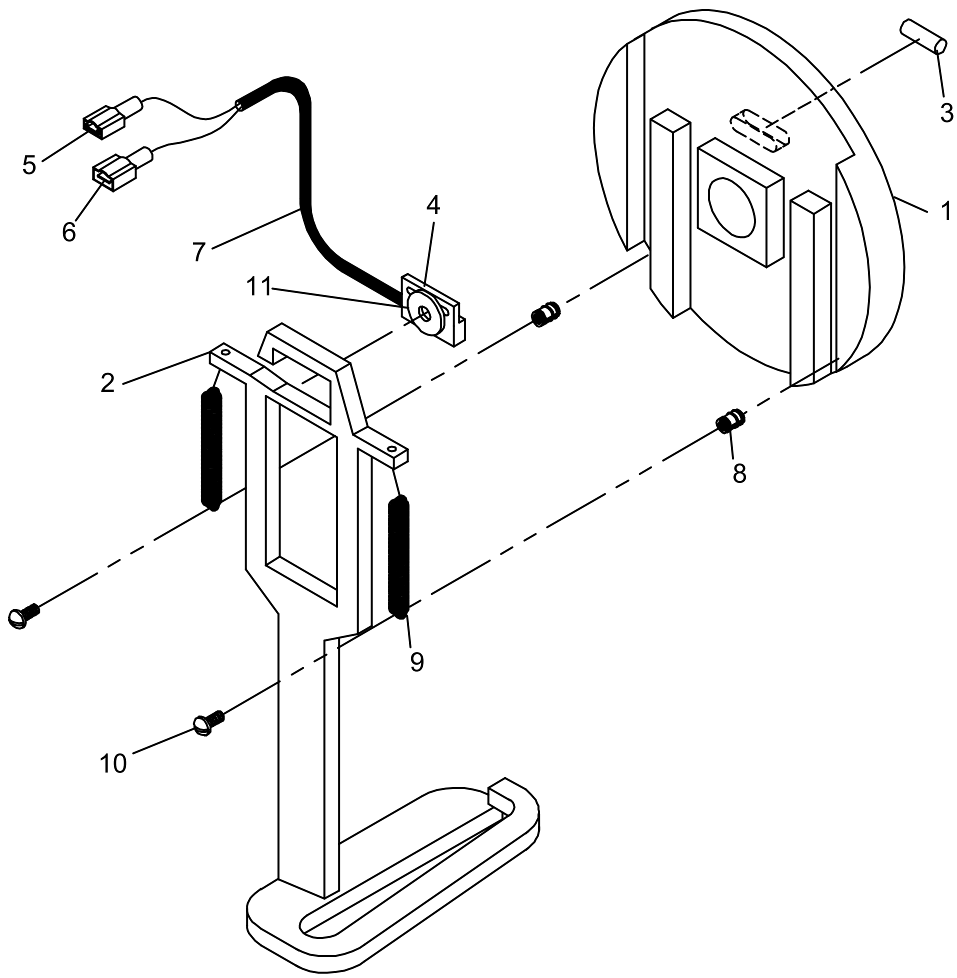
3203i Boom Assembly, Hydraulic-Manual, 15' (32000538) (Eff S/N 3754)



32000538 (S/N 3754) PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	32000530	OUTER BOOM, WELD ASSY	1
2.	32000531	INTERMEDIATE BOOM, WELD ASSY	1
3.	32000564	DC2000MF w/PM MTR	1
4.	32000025	REEL, A2B	1
5.	32000565	TRAVELING BLOCK HOOK BUSHING	1
6.	32000533	INNER BOOM, WELD ASSY	1
7.	32000180	CONTACTOR-12V	1
8.	32000289	NUT, NYLON LCK 1-8 plated	4
9.	32000777	HEX BOLT, 1-8 x 7 grd 8	1
10.	32000526	L32, BOLT, BOOM CYLINDER PIN	1
11.	32000532	THRUST TUBE, WELD ASSY	1
12.	32000225	EXTENSION CYLINDER	1
13.	32000525	1/4MNPTx4FJIC x 22"	1
14.	32000249	1/4MNPTx4FJIC x 25"	1
15.	32000196	WINCH CONTROL COVER	1
16.	32000327	THRUST LINK PIN 1x1.87	1
17.	32000566	BOLT, FLAT SOCKET, M12-1.75 x 25mm	2
18.	32000567	BRACKET, CONTACTOR, DC2000	1
19.	32000410	SLIDE PAD, XT BOOM	1
20.		-	-
21.		-	-
22.	32000484	WEAR PAD, 1/4 x 3/4 x 2"	1
23.	32000537	QUICK PIN	1
24.	32000435	A-2-B MAGNETIC SWITCH	1
25.	32000189	CORD GRIP 1/2"	1
26.	32000529	PAD RETAINER	1
27.	32000037	WIRE ROPE PULLEY, 5"	3
28.	32000394	SHEAVE SPACER 3/4"	1
29.	2000534	A-2-B DISK ASSY	1
30.	32000120	A-2-B-BUSHING	1
31.	32000055	TRAV. BLOCK AXLE	1
32.	32000421	TRAV. BLOCK SPACER	2
33.	32000436	SWIVEL HOOK 2T	1
34.	32000367	SAFETY LATCH 2T	1
35.	32000528	TRAV. BLOCK SIDE PLATE	2
36.	32000488	A-2-B WEIGHT	1
37.	32000122	A-2-B WEIGHT, ROLLER BUSH.	1
38.	32000320	RING PIN, 3/4 x 4.5	1
39.	32000481	WEAR PAD 1/4"	2
40.		-	-
41.	32000568	PIN, THRUST TUBE LOCKING	3
42.		-	-
43.	32000569	WIRE ROPE, 7/32 x 65'	1
44.	32000324	LYNCH PIN	1
45.	32000145	WINCH MTR CABLE	2
46.	32000157	WINCH PWR CABLE	1
47.	32000237	WINCH GND CABLE	1
48.	32000570	BOLT, SOCKET M12-1.75 x 30mm	8
49.	32000571	LOCK WASHER, M12	8
50.	32000572	GREASE ZERK INSERT	2

32000538 (S/N 3754) PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
51.	32000572	BOLT, HEX, 1/2-13x3.5	2
52.	32000471	FLAT WASHER, 1/4"	4
53.	32000469	LOCK WASHER, 1/4"	2
54.	32000285	HEX NUT, 1/4-20	1
55.	32000375	PAN HEAD SCREW, 10-32 x 1/2"	2
56.	32000073	BOLT, HEX, 3/4-10 x 3-3/4"	1
57.	32000291	NUT, NYLON LOCK 3/4-10	1
58.	32000527	L32, BOLT, SHEAVE AXLE	2
59.	32000284	NUT, NYLON LOCK 1/2-13	2
60.	32000070	BOLT, HEX, 1/4-20x.50	4
61.	32000646	WEAR PAD, NYLATRON, SHAVED	1
62.	32000286	NUT, NYLON LOCK, 1/4-20	1
63.	32000229	EYE-BOLT E1-BENT	1
64.	32000573	BOLT, HEX, 1/4-20 x 3.50	1
65.	32000536	ROPE PIN	1
66.	32000024	BOOM ANGLE INDICATOR KIT	1
67.	32000574	COUPLING	1
68.	32000575	VELOCITY FUSE	1
69.	32000576	REDUCER BUSHING	1
70.	32000577	1/4 x 3, NIPPLE	1
71.	32000372	SCREW, TEK #10 x .75	2
72.	32000694	NUT, CONDUIT CONNECTOR 1/2"	1
73.	32000722	SCREW, RD HD 6-32 x 1/2"	2
74.	32000294	NUT, HEX 6-32	2
75.	32000616	PLUG, 7/8 FLUSH BUTTON	1
EFF S/N 3754			

Anti-Two-Block Assembly (32000882)

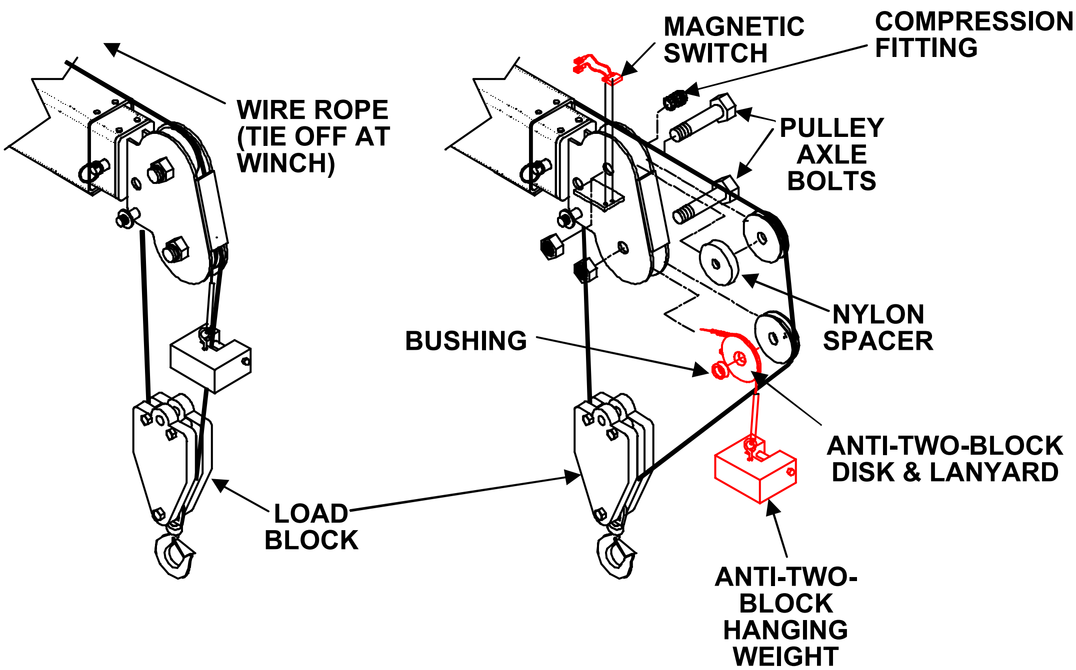


ANTI-TWO-BLOCK ASSEMBLY PARTS LIST (32000882)			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	32000880	DISK	1
2.	32000881	SWITCH ARM	1
3.	32000270	MAGNET 1/4 X 3/4	1
4.	32000435	MAGNET SWITCH	1
5.	32000873	TERMINAL, FEM INSULATED	1
6.	32000769	TERMINAL, MALE INSULATED	1
7.	32000887	SHRINK TUBE, 3/16"	4"
8.	32000875	THREADED INSERT, 8-32	2
9.	32000426	SPRING	2
10.	32000383	SCREW, ROUND HD SLOT, 8-32 X 3/8	2
11.	32000471	WASHER - FLAT - 1/4	1
REV 20080214			

Anti-Two-Block Conversion from Hanging Weight to Plunger

NOTE: Cranes manufactured after January 2008 use the plunger anti-two-block design. The hanging-weight anti-two-block design has been discontinued. If your crane uses the hanging-weight design and your anti-two-block system requires repair, the system must be converted to the plunger design.

Removing Hanging-Weight Anti-Two-Block Parts:

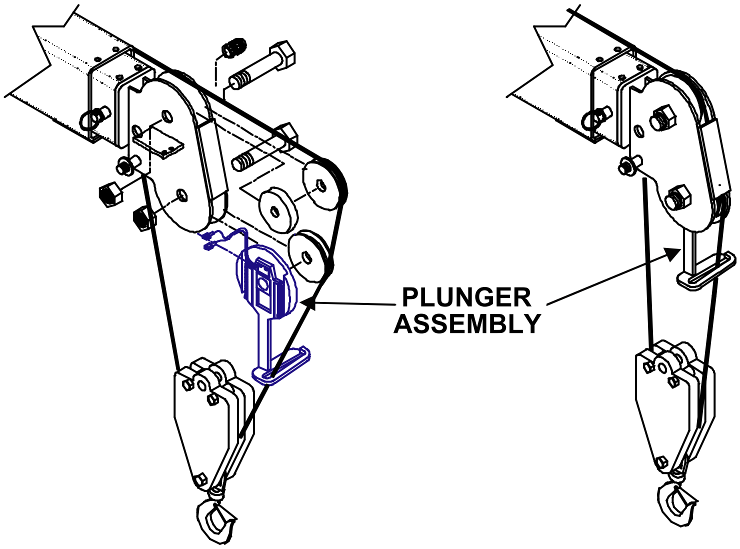


1 Secure the wire rope at the winch to preserve the wraps and prevent backlash. Remove the load block or support it to take the tension off the rope.

2 Loosen and remove the pulley axle bolts and nuts, pulleys, nylon spacer, anti-two-block disk with lanyard, stop, and spring, and bushing. Save the pulleys, bolts, and nuts but discard the anti-two-block disk and weight.

3 Loosen the nut on the compression fitting on the left side of the boom and pull enough wire through so you can unplug and remove the magnetic switch. Discard the magnetic switch.

Installing Plunger Anti-Two-Block Parts:



1 Connect the new magnetic switch on the plunger assembly to existing wire connections.

2 Install the lower pulley axle bolt far enough to support the lower pulley, but not far enough to interfere with sliding the plunger assembly up in place beside the lower pulley.

3 Put the lower pulley in place. Lay the wire rope in the lower pulley. Slide the plunger assembly into place. Make sure the magnetic switch stays in its slot and the wires are not caught between the plunger and pulley or the plunger and steel side of the boom sheave plate.

4 Push the lower pulley axle bolt through and install the nut. Do not overtighten! Hand tighten until snug.

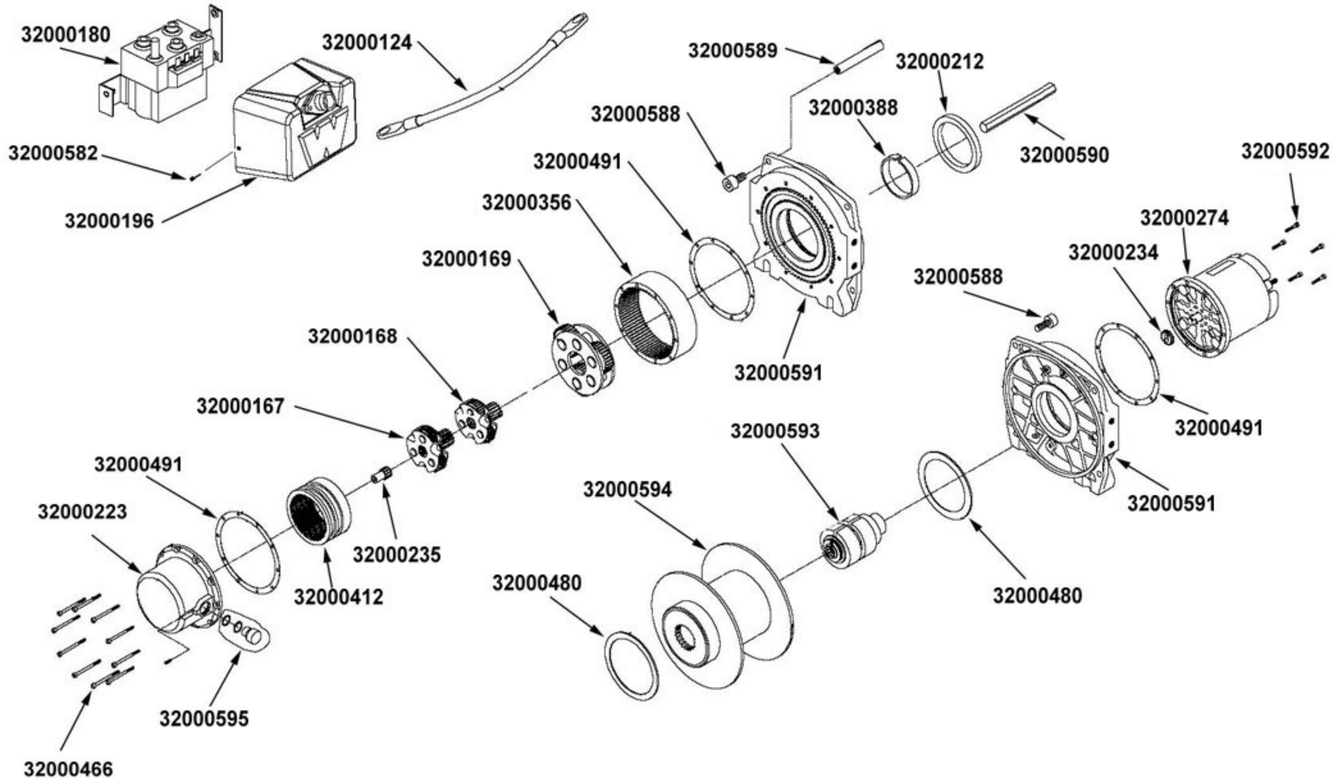
5 Pull the excess wire (running to the switch) through the compression fitting. Leave just enough excess to allow the plunger assembly to rotate to the rear without pulling on the wires. Re-tighten the compressor fitting.

6 Reinstall the upper pulley, nylon spacer, upper pulley axle bolt, and nut. Do not overtighten the nut! Make sure the wire rope lays in the upper pulley.

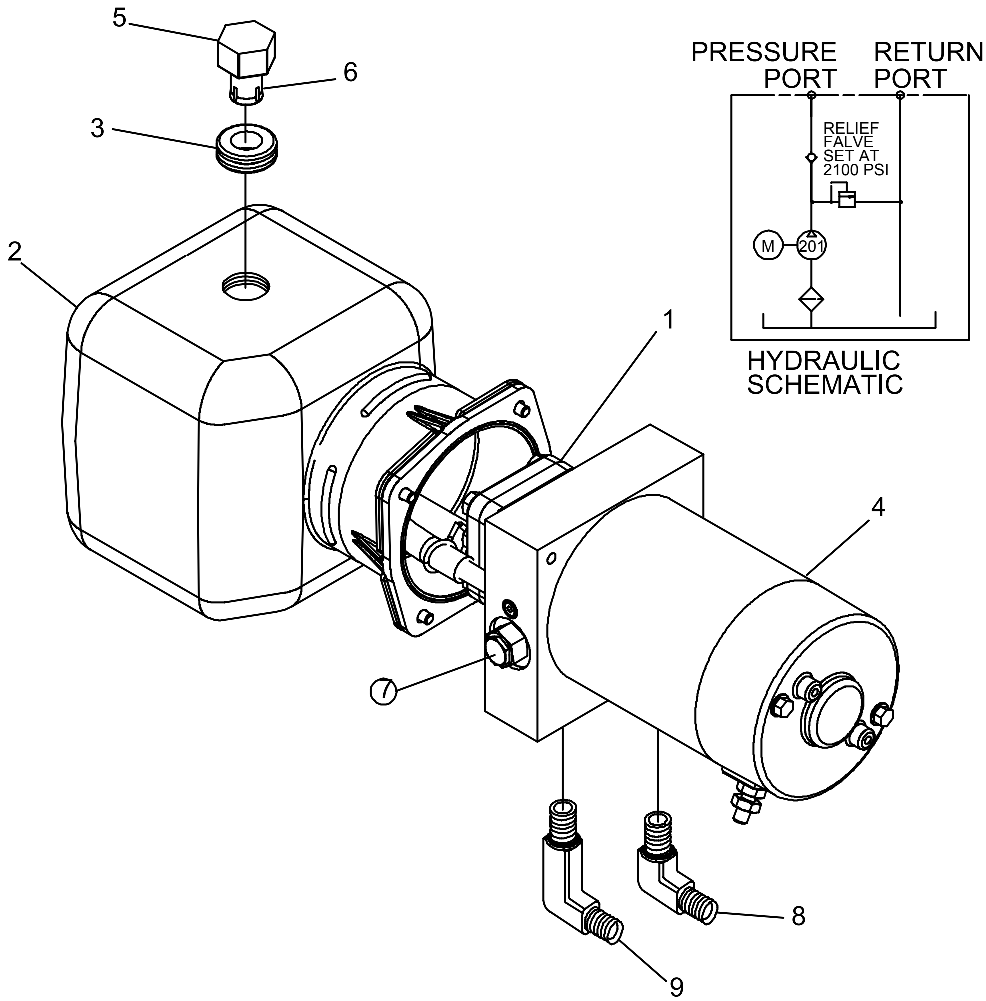
7 Thread the wire rope through the shoe of the plunger assembly. Hang the load block.

8 Test anti-two-block system before returning the crane to service.

Winch Assembly (32000564)



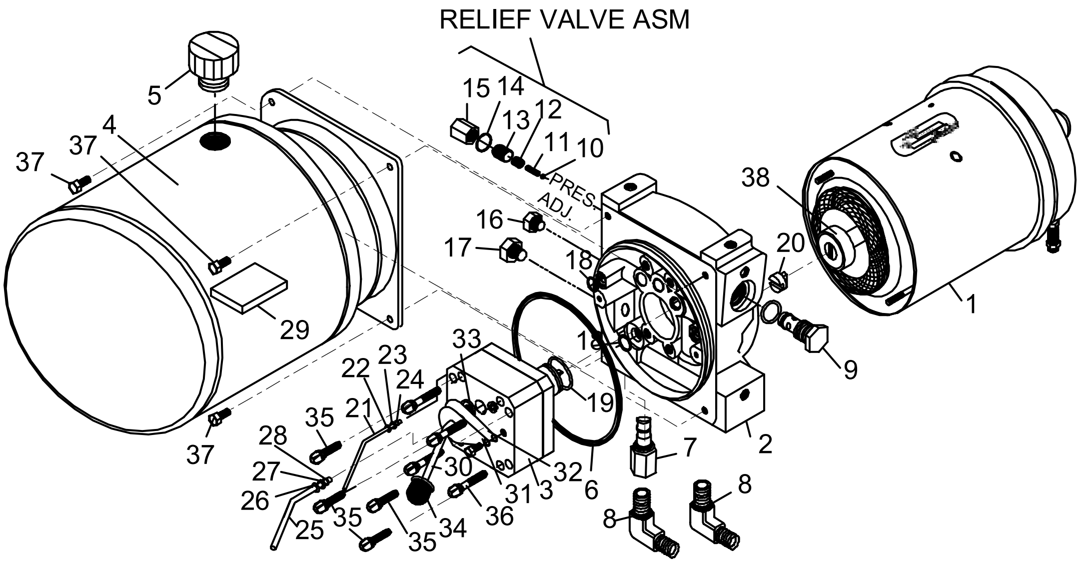
Hydraulic Power Unit (32000902) (Eff. S/N 4338)



32000902 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	32000909	PUMP	1
2.	32000910	RESERVOIR, 1-GAL PLASTIC	1
3.	32000892	RUBBER GROMMET	1
4.	32000029	MOTOR, 12VDC STANDARD DUTY	1
5.	32000893	BREATHER CAP	1
6.	32000894	INLET FILTER	1
7.	32000923	RELIEF VALVE	1
8.	32000559	ELBOW, M-JIC M-ORING 90DEG 6-6	1
9.	32000911	ELBOW, M-JIC M-ORING 90DEG 6-6 LL	1
REV 20080513			

IF YOUR CRANE SERIAL NUMBER IS 4337 OR LOWER, YOUR POWER UNIT ASSEMBLY 490030 (32000515) IS NO LONGER AVAILABLE. PLEASE ORDER (121110) 32000953 TO REPLACE IT.

Hydraulic Power Unit (32000515) (Through S/N 4337)

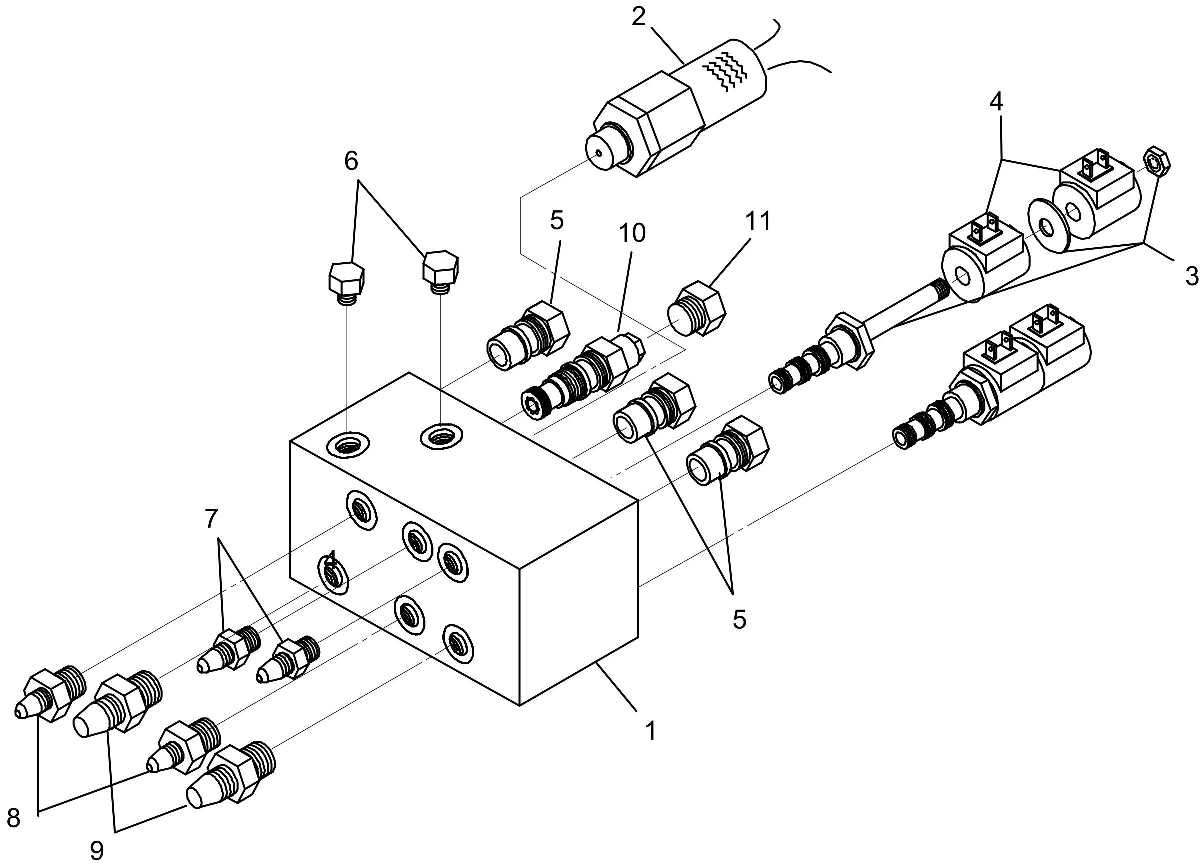


NOTE:
EFFECTIVE 10-1-2009, ITEM #3 - 32000233, GEAR PUMP KIT, AND REFERENCE ITEM - 32000337, PUMP, ARE NO LONGER AVAILABLE. IF YOU NEED EITHER OF THOSE COMPONENTS, YOU MUST PURCHASE THE COMPLETE POWER UNIT, 32000902 FOR A 3203i OR 4004i CRANE, OR 32000953 FOR A 5005i OR 6006i CRANE.

HYDRAULIC POWER UNIT PARTS LIST (32000515)			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	32000029	MOTOR, HYD PUMP, 12V	1
2.	32000338	PUMP ADAPTER	1
3.	32000233	GEAR PUMP KIT	1
4.	32000026	RESERVOIR, 1 GAL WELDED	1
5.	32000028	CAP, BREATHER 3/8 NPT	1
6.	32000027	O-RING FOR 1 GAL WELDED RESV	1
7.	32000333	PORT PLUG KIT	1
8.	32000559	ELBOW, 6MSAE X 6MJIC	2
9.	32000174	CHECK VALVE ASSY	1
10.	32000389	SEAL, BALL	1
11.	32000423	SPRING	1
12.	32000427	SPRING, HIGH PRESSURE	1
13.	32000384	SCREW, ADJUSTING	1
14.	32000387	SEAL	1
15.	32000296	NUT, HEX CAP	1
16.	32000308	O-RING PLUG #4	1
17.	32000309	O-RING PLUG #6	1
18.	32000304	O-RING 1/4"	2
19.	32000311	O-RING, PUMP TO ADAPTER	1

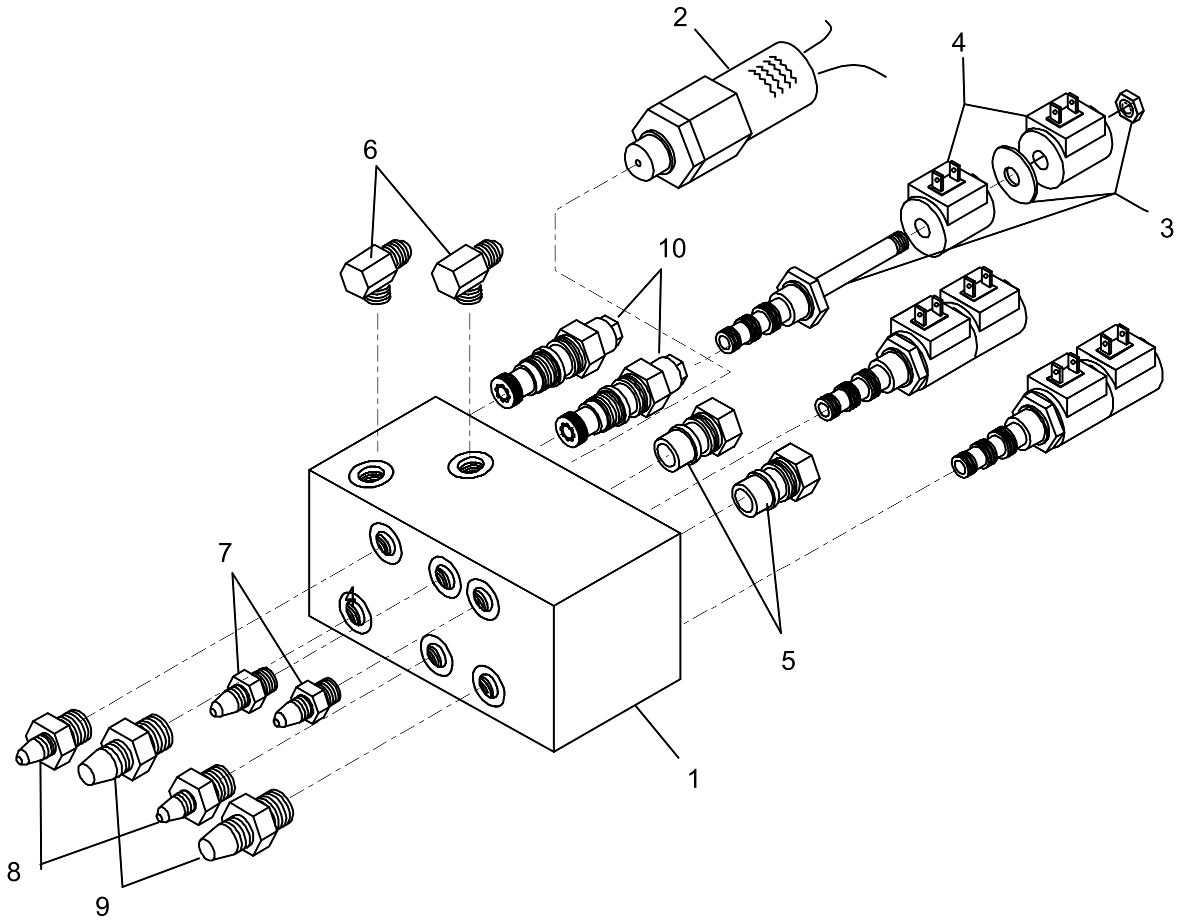
HYDRAULIC POWER UNIT PARTS LIST (32000515)			
20.	32000339	PUMP COUPLING	1
21.	32000455	TUBE, RETURN, RELIEF VALVE	1
22.	32000307	O-RING FOR RETURN TUBE	1
23.	32000360	RING, PUSH-ON RING, RET. TUBE	1
24.	32000398	SHIM FOR RETURN TUBE	1
25.	32000453	TUBE, RETURN	1
26.	32000466	WASHER	1
27.	32000359	RING, PUSH-ON	1
28.	32000302	O-RING	1
29.	32000271	MAGNET, RESERVOIR	1
30.	32000450	TUBE, INLET	1
31.	32000353	RETAINER, LOCKING	1
32.	32000310	O-RING RETAINER	1
33.	32000306	O-RING FOR INLET TUBE	1
34.	32000430	STRAINER	1
35.	32000068	BOLT, 1/4-20 X 1.25 TORX HD	4
36.	32000069	BOLT, 1/4-20 X 2 TORX HD	4
37.	32000070	BOLT, 1/4-20 X 1/2"	4
38.	32000056	BEARING, BALL	1
REF	32000337	PUMP (EXCL. 1,7,8)	1
REV 20080129 S/N 3624B			

Hydraulic Manifold, Manual (32000579)



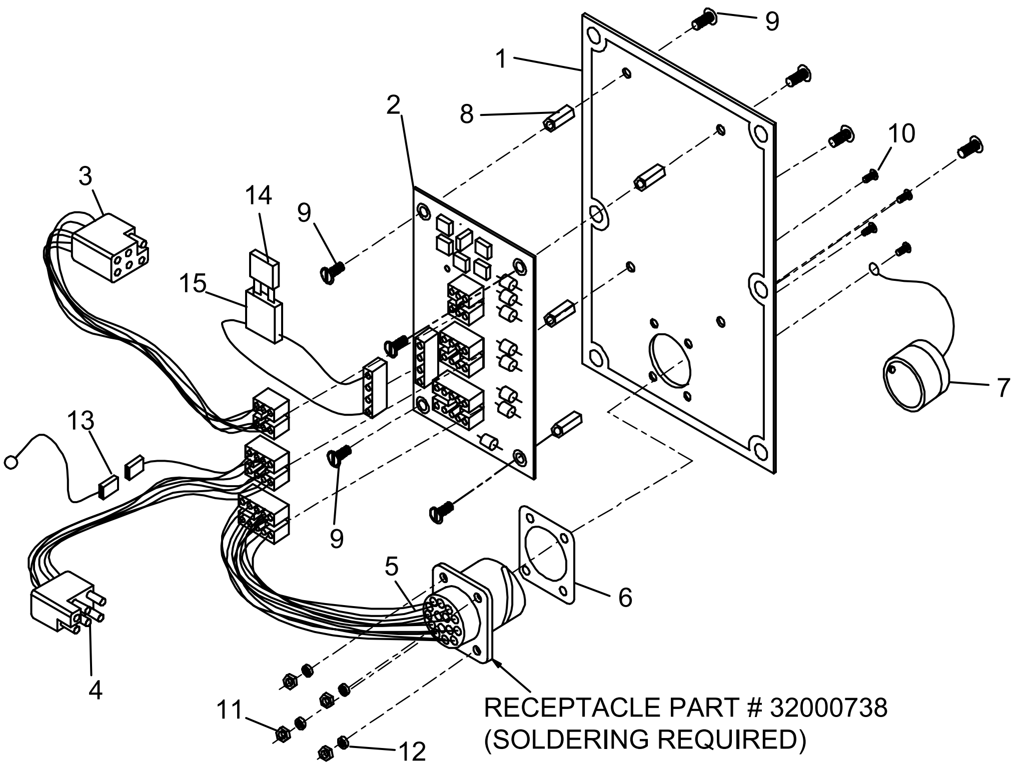
HYDRAULIC MANIFOLD, MANUAL (32000579)			
ITEM	IMT #	DESCRIPTION	QTY
1.	32000257	MAINFOLD, HYDRAULIC	1
2.	32000031	SWITCH, PRESSURE	1
3.	32000030	CARTRIDGE, DIRECTIONAL VALVE	2
4.	32000415	COIL, SOLENOID, 10V	4
5.	32000173	PLUG, CAVITY	3
6.	32000308	PLUG, 1/4 O-RING	2
7.	32000544	O-RING 4-MSAE 4MJIC	2
8.	32000428	STRAIGHT 4MJIC X 6MSAE	2
9.	32000052	M-JIC/M-ORING 6-6	2
10.	32000194	VALVE, COUNTERBALANCE	1
11.	32000587	PLUG, O-RING #8	1

Hydraulic Manifold, Power (32000516)



HYDRAULIC MANIFOLD PARTS LIST (32000516)			
ITEM	PART #	DESCRIPTION	QTY
1.	32000257	HYDRAULIC MANIFOLD	1
2.	32000031	PRESSURE SWITCH	1
3.	32000030	DIRECTIONAL VALVE CARTRIDGE	3
4.	32000415	SOLENOID COIL, 10V	6
5.	32000173	CAVITY PLUG	2
6.	32000219	ELBOW, 4MSAE X 4MJIC	2
7.	32000544	O-RING #4MSAE #4MJIC	2
8.	32000428	STRAIGHT 4MJIC X 6MSAE	2
9.	32000052	#6MJIC #6MO-RING	2
10.	32000194	COUNTERBALANCE VALVE	2

Quik-Turn Control Module (32000682)

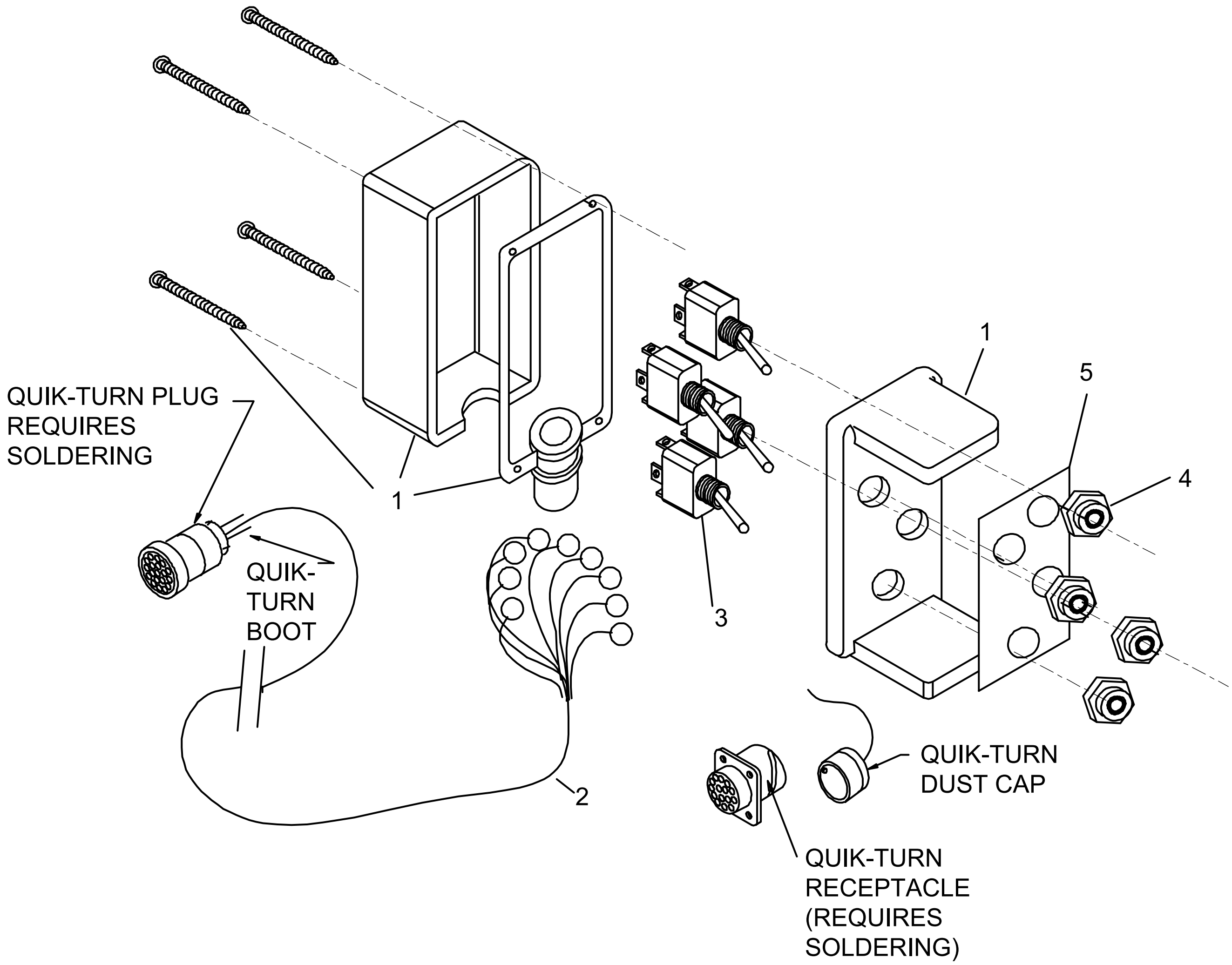


QUIK-TURN CONTROL MODULE (32000682)			
ITEM	PART #	DESCRIPTION	QTY
1.	32000183	CONTROL MODULE LID	1
2.	32000948	CIRCUIT BOARD, CONTROL MODULE (SEE NOTES)	1
3.	32000733	HARNESS, CONTROL BOARD, 6-PIN	1
4.	32000734	HARNESS, CONTROL BOARD, 8-PIN	1
5.	32000735	HARNESS, CONTROL BOARD, 10-PIN	1
6.	32000232	GASKET, QUIK-TURN, 11-PIN	1
7.	32000038	CAP, DUST, QUIK TURN	1
8.	32000283	NUT 1/4" HEX STANDOFF NUT 6-32X.50	4
9.	32000380	SCREW, 6-32 X .25 RDHD	8
10.	32000381	SCREW, 6-32 X .5 RDHD	4
11.	32000294	NUT, 6-32 HEX	4
12.	32000472	WASHER, LOCK #6	8
13.	32000184	CONTROL MODULE, GROUND JUMPER	1
14.	32000736	CIRCUIT BREAKER, 10-AMP	1
15.	32000737	HARNESS, FUSE HOLDER, CONTROL BOARD	1
REV. 20090316			

32000682 CIRCUIT BOARD REPLACEMENT NOTES:

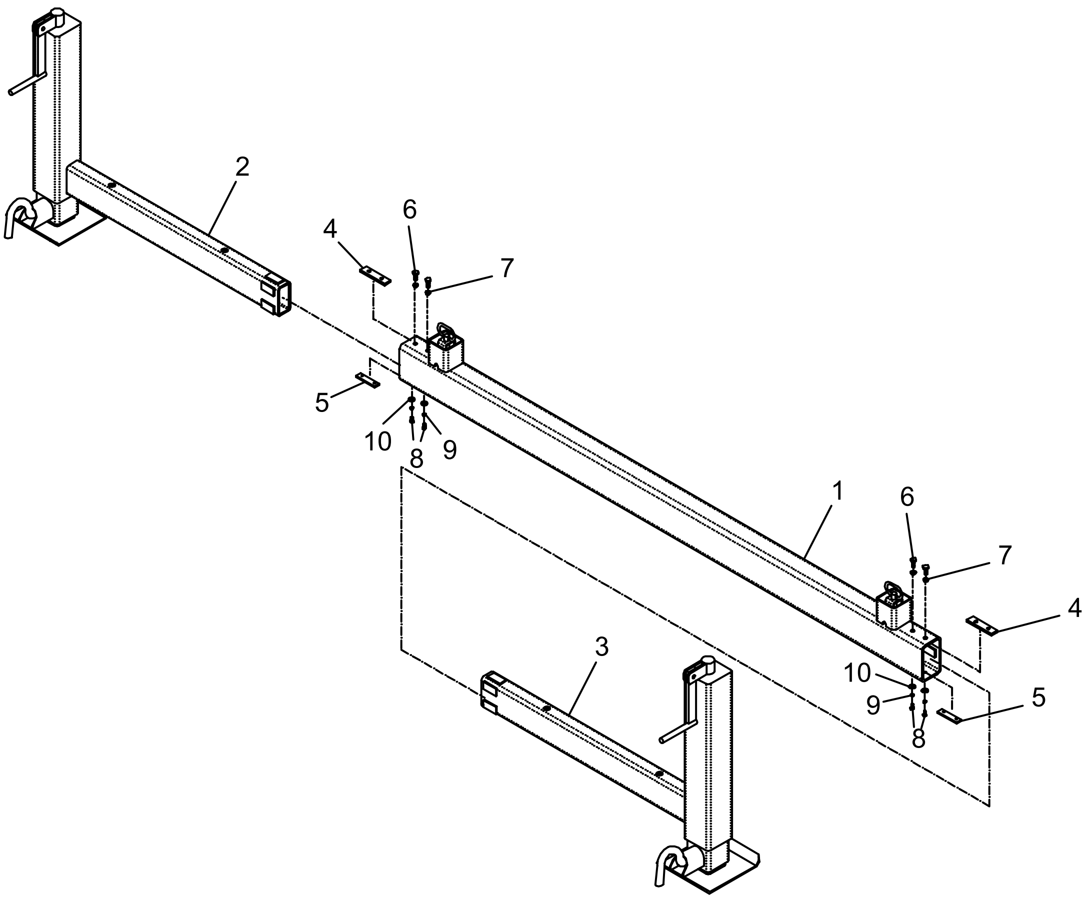
1. CIRCUIT BOARD 32000175 REPLACED BY CIRCUIT BOARD 32000948 EFFECTIVE S/N 4440.
2. CRANES WITH SERIAL NUMBERS FROM 2414 - 3707 ALSO MUST PURCHASE 1-EACH OF FUSE HARNESS 32000949, FUSE 32000736, AND 10-PIN HARNESS 32000950.
3. CRANES WITH SERIAL NUMBERS FROM 3708 - 4439 ALSO MUST PURCHASE 1-EACH OF 10-PIN HARNESS 32000950.

Quik-Turn Remote Pendant (32000034)



32000034 PARTS LIST			
ITEM	PART #	DESCRIPTION	QTY
1.	32000318	PENDANT BOX	1
2.	32000193	CORD/PLUG, QUIK TURN, 25'	1
3.	32000447	TOGGLE SWITCH, SPDT	4
4.	32000434	SWITCH BOOT, NEOPRENE	4
5.	32000204	DECAL, QUIK TURN	1

Outrigger, 80" with Dual Side Crank (32000017)



32000017 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	32000919	OUTER TUBE WELDMENT	1
2.	32000920	LEFT HAND INNER EXTENSION	1
3.	32000921	RIGHT HAND INNER EXTENSION	1
4.	32000350	RETAINER	2
5.	32000482	BOOM RETAINER	2
6.	32000291	BOLT, HEX 3/8-16 X 1/2	4
7.	32000476	LOCK WASHER, 3/8	4
8.	32000070	BOLT, HEX 1/4-20 X 1/2	4
9.	32000469	LOCK WASHER, 1/4	4
10.	32000471	FLAT WASHER, 1/4	4
REV 20080513			